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THE CREATIVE ROLE OF CONFLICT IN INTERGROUP RELATIONS

DAN W. DODSON*

Historically, the work of the National Association of Intergroup Relations Officials has had an interesting history. Its early background stems from many sources. There were agencies such as the Jewish Defense agencies, the N.A.A.C.P. and the Urban League which had worked for a long time developing democratic acceptance of the minority group person. Then there was the National Conference of Christians and Jews whose program stemmed from concern over the amount of hostility toward the Catholic group in the Al Smith Campaign—and tied with this of course—the hostility toward Jews in American life.

Prior to World War II there was the development of what might have been called intercultural education or programs to develop better intergroup relations by teaching people to better understand and appreciate each other's cultures and particularly by bringing to the attention of the education profession the unique contributions of the various cultural groups to the commonality of American life.

Another antecedent has been the enormous amount of teaching and preaching and effort on the part of religious organizations in America to bring about a better relationship between peoples of the country and the world—with the notion that we should learn to appreciate the inherent dignity and worth of all people.

The real push, I am sure you would all agree however, came with World War II. At this point there was an enormous amount of unrest in American communities not only because we were fighting a war against racism abroad but as well because at home we were denying the very things to some of our citizens for which we were fighting for other peoples across the world.

The incongruity of this situation, however, did not appreciably alter relations until after violence flared in places like Detroit, New York City and Beaumont, Texas. Following these outbursts of violence, however, there immediately emerged concern in communities across this country—particularly the northern and industrial sections—to

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An address to the Eleventh Annual Conference of the National Association of Intergroup Relations Officials.

bor and the attendant stripping of rights and citizenship of those of the Japanese background group? Do you remember the propaganda about the Japanese—the people with the buck teeth, the gold-fillings and all the things that went with it? And if you were to survey the same groups today for comparable hostility, stereotyping and prejudicial content you would find very little of it. We now think of the Japanese as nice and tremendously interesting people and have a very warm relationship to them.

How does it happen that prejudices are turned on and off with such amazing facility? I would contend that the pre-judging and the hostility are symptomatic of relationships between groups and not by and large the cause of particular relations between them.

Is this relevant to an understanding of the issues facing us in America? From this position it is more apparent as to what is involved when the structural relations between groups in this country are changed or threatened in areas as significant as desegregation of education. What we see is the manifestation of prejudice, violence and other kinds of hostilities toward peoples as they go through the restructuring of their relations to each other.

I know of few ways in which group relations can be restructured except through conflict. On the other hand the major portion of our agencies are very afraid of conflict. All too many of the agencies we represent were created by mayors and other responsible officials whose interest was in keeping conflict from occurring in their communities. Too often we are expected to placate the conflicting interests rather than use such conflict to achieve creative goals in which the relations between groups become restructured without destructive conflict.

Be that as it may, the cutting edges of a democratic society are the points of tension and conflict and are not at those places in which the issues have already been decided and groups have more or less accepted their structural relations to each other.

The significance of this approach to intergroup relations can be better understood by an examination of civil rights in America. A good case could be made that growth and interest in civil rights has stemmed not from what we have done as ameliorative agencies but rather because of what has happened in the restructuring of relations between groups because of the broad social changes which have occurred. The War brought millions of Negroes, for instance, from southern communities into our large northern, eastern and western cities. They today hold the political balance of power, theoretically, at least, in six of the larger states of the Union: New York, New Jersey, Pennsylvania, Illinois, Michigan and perhaps California. These are states in which there is a relatively even balance of power between

the political parties and the Negro vote can tip the scales in either direction. Consequently, it is at long last beginning to dawn upon the political structure of our society that civil rights can be no longer ignored—we are getting today what we have not had since the reconstruction era—a serious interest of the federal government in the civil rights of the people. Needless to say, the Courts found ways of reversing previous decisions and interpreting rights in line with what is the political realism of the society. Needless to say the Negro group itself, together with other minorities, has come to sense some of its power. If one believes however that the improved status of Negroes has come because of what we have done in changing attitudes of Americans,—that is, that it has come through a change of heart of the American people, rather than because of the change of power relationships between groups,—he had best look at the American Indians and the Mexicans in the southwest and the Pacific coast who do not have such power and such political leverage.

As it is in the Nation so it is also in our communities. Cities which never before paid any attention to the deplorable conditions of Negroes are today beginning to awaken as the size of the Negro community grows and as Negroes develop sophistication in the use of the ballot. This vast in-migration of Negroes to the inner-cities of all our major metropolises has created new power relationships between groups in these places. When it is realized that between 1950 and 1955, 12 million people moved to the large metropolitan areas of America and that there was an attendant growth out of this 12 million of only 2,400,000 in the inner-cities themselves, one gets some sense of the great impact which migration has had upon American people since the war. It has meant the movement of the white middle-class to the suburban areas and it has meant the taking over of large sections of the inner-cities by the minority groups—heavily Negro—as they have taken the places left by the whites as they have fled to suburbia.

This means that in practically all our cities there is a great realignment of the power structure. The relationships between the groups is being rapidly restructured. Thus there is a resurgence of hostility, animosity, prejudice and ill-feeling and sometimes open violence. I submit to you, however, that we learn very rapidly from the structure of group relations in which we find ourselves. Today, in our northern communities, we are wrestling with what is now called *de facto* segregation. No one thought in the years past, prior to the Supreme Court decision, that segregation on a neighborhood basis was wrong at all. But when the Negro group achieves power enough to challenge such segregation, which carries with it discrimination in services to Negro children, many of our people have found it difficult to accept the new

relationship between the races and there has been much dragging of feet and complaint about Negroes being so pushy.

Likewise in housing we are facing comparable challenges. Prior to the change in power, very few people complained that Negroes lived in segregated neighborhoods. Many felt that they should have had better housing and much planning was to provide more good housing for Negroes—so there were built, even in southern communities, Negro neighborhoods for middle-income people. When Metropolitan Life Insurance built Stuyvesant Town it built a project approximately one-seventh in size, which was about the proportion of Negroes in the population of New York City, for the Negroes in the Harlem community. Today there is the demand that this structural relationship in housing be changed. There is pressure to get not only integrated public housing but to get integrated neighborhood living again. This has brought about much complaint about Negroes invading white communities and other manifestations of hostility. But very rapidly we are facing a show-down fight on whether or not Negro persons may buy in neighborhoods befitting their economic means and cultural status the same as do all other American citizens. This pressure has brought manifestations of great hostility and prejudice from some persons who might have been called liberals in other times. They are being dubbed "fair-weather liberals" when they balk over changing some of these more basic relationships between peoples. I dare say, given a few years, however, and if we do our job of helping rationalize the changes which are, relatively speaking, forced upon them, no one will think anything strange about a balanced neighborhood—no one will think anything wrong about living in areas in which peoples representing all Americans of comparable cultural and social backgrounds live.

So it is in the field of inter-faith relations. Today the hostilities between the faith groups stem very little from differences of theological beliefs. If this were the only differences between our groups, they would be about settled. The big issues between us are instead, what are equitable relationships between these religious groups in American life. They have been pointed out in a recent number of *The Journal of Social Issues*. Much more have the fights become power fights between faith groups rather than controversies over dogma and creed. The big issues, for instance, today are relations between church and state, to what extent shall the schools teach religious materials, or in such things as child care—who gets which children in adoption agencies, shall the so-called fringe benefits be extended or constructed for children under religious programs. These are power fights. They are fights between structures in the community over things in which dogma and belief are only peripheral. The expressed hostilities and

the prejudices take their cue not from deep-seated stereotypes and pre-judgments about who are Catholics, who are Jews or who are Protestants but instead from what is the structural relation of one group to the other as they haggle over the changing relationships in their own vested interests.

What is the significance then of this kind of approach to inter-group relations? One implication of it is that those of us who work in the field should understand the role of conflict in the restructuring of such relations. Where the restructuring takes place such as has happened in southern communities it is understandable that there would be hostility and perhaps what the weather people would call "turbulence" as the climate changes. It would be expected that those who have vested interests would give them up only reluctantly. It would be predictable that those who have been denied these privileges, who have been barred from them by legal procedures and by government power, would get a new lease on life and aspire toward the breaking down of such barriers. It would be taken for granted that this would bring hostility in its wake.

Once the issue is settled, however, through political power or conflict—and there is the understanding that the changed relations are going to be—it is amazing how quickly people can adjust to them. Take for instance Clinton, Tennessee—people who were arrested for rioting this year come back next year and apologize to the local officials for their actions and accept the change of relationships between groups for what they are and come to accept this pattern of behavior as normal. In Little Rock, violence has rapidly subsided as it is made clear that the force of federal government is behind the change in the structural relationship of the groups. Once this principle is established—and made plain enough that even the governor finds out about it—there will be little difficulty in Little Rock. Nashville, Tennessee—a comparable kind of thing—as soon as it was clear that the force of the local government was behind the desegregation program there was no difficulty. This is of course what led Kenneth Clark to write in the monograph for SPISSI (Society for the Psychological Study of Social Issues) that the conflict tends to come at the point at which the changed policy is being decided (being tested perhaps one would better say) and tends not to continue after the test has been made.

This approach to conflict places an awesome responsibility on those of us who are in intergroup relations leadership to make certain that our agencies themselves do not become instrumentalities which stamp it out before it has achieved its purpose. Sometimes a carbuncle has to come to be lanced and you only prolong the suffering if you put ointment on it designed to keep the festering from coming to a head. There is a great danger that we may become placators or that we may

become persons who use the status of our offices to keep change from happening—that is to keep relations from being restructured—rather than allowing conflict to run its course to the point at which restructuring takes place.

I was most impressed with this, I think, in a controversy in which the Mayors Committee on Unity was involved. On 125th Street, in New York City, a consumer protective group started picketing the stores on 125th Street in October of 1945. Between that time and Christmas, the stores lost over a quarter of a million dollars because of their picketing based on charges that the stores used unethical practices and were not sympathetic to the Negro community itself. There was sufficient basis of fact in their criticisms that it was impossible for a person representing the government to intervene in it unless and until there was some hope of change in the attitudes of the merchants and unless and until there was a new understanding between the groups as to what was a way of behavior. Consequently, the picketing ran from the middle of October to the middle of December in one of the most lucrative of shopping seasons at a great loss in trade to the merchants. I would have considered it immoral to have jumped into that situation without some assurance that there was a lesson learned out of it, that the structure of relations between the two groups had been accomplished.

The conflict issue involves almost every agency with which we are working. I think that one of the most difficult issues in education, for instance, is that the educators consider it to be tremendously bad if there is conflict in their schools. All of us, however, know that if there is freedom there is going to be conflict. It becomes embarrassing to the school system if such happens, consequently there is a tendency to become so authoritarian in school programs that there is little possibility for youngsters to interact with freedom and little opportunity for them to restructure relationships between themselves.

The same could be said for most of the other agencies of community. All are afraid of conflict. They are afraid of the bad name it would give. They find ways of circumventing it to keep it from happening. I would contend, however, that to the extent to which conflict is averted as a normal part of relations we become undemocratic and from a mental-health point of view unsound in programming. One job we have, I think, is to help all of our agencies understand that a type of conflict and tension between peoples is not necessarily bad.

Our big issue is then how do we handle conflict toward creative ends. Labor-management teaches us many things about it, one of which is that we accept rules of the game by which we fight our battles. For instance, sometimes labor has to go on strike and the strike has become a rather effective means of achieving a restructur-

ing of relations between management and labor—but out of the strike pattern of the years has emerged something new, namely, the respect on the part of management of labor's right to strike and strike-breaking has gone by the board in most instances. The devastating strikes tend to have the intervention of government and there has gradually developed a procedure through which the industrial community moves toward the settling of its differences short of the stoppage of work. This does not mean that there is not conflict still. It does not mean that there are not differences, but it does mean a way of handling these differences was created so that out of it comes more creative and constructive relations between groups and less of the stultifying violence which used to characterize our industrial life.

It is not easy to interpret to the power structure of our communities this point of view. It is not easy to help them understand how these things operate. But the intergroup relations person who does a creative job must somehow help those with whom he works to understand the normal use of conflict in community relations.

There is another dimension to it for human relations persons to ponder. When one looks at Hunter's book "The Community Power Structure," he is impressed at how far down on the totem-pole of power structure in the community is the human relations agency person. This raises serious questions as to what we can or should do in our efforts. Are we too often the instrumentalities of the power structure of the community with the job of holding in line the peoples who may be ambitious and up and coming? Does it mean that we are hand-maidens of the vested interests who are tied up with the power structure to the point that we really prevent democratic relations from emerging rather than helping them come about? This is, to me, one of the greater issues with which we are involved as professional people. How can we, on the one hand, work with and through power in the community and at the same time be free and independent enough that we can not only operate as technicians in negotiating the differences but may even have some hand in stimulating the minority group, for instance, or the disprivileged group, be it the new-comer or whoever, —stimulating them to make greater demands and to resort to those techniques of conflict which would bring about a restructuring of relations between themselves and the community which they are a part.

This is the challenge, it seems to me, for human relations in our era ahead.

REALITY PERCEPTION, PERCEPTUAL DIFFERENTIATION AND READINESS FOR SCHOOL

ANTON BRENNER*

This paper is the first section of a report which deals with a new Gestalt test for estimating readiness for school. The study is based on the following assertions: growth, development and learning take place through constant interaction between an individual and his environment. This leads to a gradually increasing accumulation and differentiation in the individual organism with an increase in his ability to perceive, to analyze and to synthesize experience from both within and beyond himself.

Our hypothesis is: the more developmentally advanced the person is the more he is able to act effectively in pursuing and controlling his developmental tasks. Translated into readiness for school this means that the more a child is able to perceive, to incorporate experience into developing behavior and finally to analyze and to synthesize, the more is he ready for school. Readiness then can be considered a continuing function of perceptual and personal development.³

This paper offers a frame of reference for interpreting underlying factors which seem to warrant the kind of test information to be used for estimating readiness for school. The discussion focuses on the conceptual relevance of perceptual development and the idea of Gestalt differentiation.

THE ROLE OF PERCEPTION IN HUMAN DEVELOPMENT AND EDUCATION

Interest in the nature and role of perception has gained markedly in recent years. Perception is not a new concept, though. Gottfried Wilhelm Leibniz, eminent German philosopher, physicist and mathematician (1646-1716) said: "The small perceptions are more important than you think." He based his whole philosophy on the concept of perception. In his system of thought, perceptions develop from the lowest degrees of consciousness and distinctness to gradually and continuously higher degrees of consciousness, distinctness, complexity and abstraction. Leibniz' mathematical thinking, the laws of individuality

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and harmony of discords and opposites in the universe are based on infinitesimal differences in perception which unfortunately, he says, we do not see and consider thoroughly. If we did there would be a much better understanding of identity, similarity and differences in the inorganic, organic and human universe and gaps could be over-bridged more easily. With his concept of the unconscious, the small, little-awake perceptions, Leibniz was the most significant forerunner of Freud⁶ and Jung. He was followed by Schelling, Jacobi, Goethe, Herder, Carus, Novalis, Ferguson and others who stressed the importance of the unconscious as opposed to rationalism.

In recent years, many new studies of perception are appearing. One of the most lucidly written books about this subject is that of Earl G. Kelley¹⁰ *Education for What is Real*. Kelley himself and John Dewey considered this book "a report on the significance to education of the findings in the nature of perception, of knowing and of life itself." (p. IX). While I do not agree with everything Kelley says, I would like to quote him as an authoritative exponent of the importance of perception in human development and education:

The eye is not our only source of information, but it is certainly our most important one. . . . If we can understand the nature of what we see we will know much more about what we think, feel and hold as an attitude. (p. 24) . . . What we do is on the basis of perception, not on the basis of the object. What I do depends upon what my experience and purpose brought to the situation. (p. 37) Certain it is that the basis of knowing is perception and a real understanding of perception going beyond the naive receiving station concept will enable us to understand more clearly the nature of man himself. It is in the act or the miracle of perception that contact is established with externality, that experience and growth become possible and that meaning comes into being. (p. X)

All education has to work through perception of one kind or another. How perception is induced and where it comes from is of vital importance to educators. Perception is their stock-in-trade. If we understood perception fully, we might then learn to work in keeping with the laws which govern it. This, of course, applies to all perception, whether visually or otherwise induced. (p. 24)

Speaking as a teacher, I believe that if we really master these basic facts of perception, they will tell us how to arrange for the growth of children, and from this point of departure we can finally establish what we may believe about teaching and learning. (p. X)*

* I would not agree with Kelley's cardinal statement that "the only reality is a perception located somewhere behind the eyes." (p. 35) This is true only in the sense of "functioning" or "usable" reality, of what is "real to a person," to quote Kelley. Kelley's statement should not be interpreted in the sense that there is no objective existence of reality, person or thing, regardless of my perception. There is a common world, however, our response to it, the way we experience it, is never quite alike in various individuals. Kelley is not consistent in the use of phrases such as reality as it "is" or "exists" in comparison with reality as we "experience" it. There is an important difference between these ideas. On page 28, Kelley does "not deny the existence of the external material."

These are the words in which Kelley tells of the importance of perception in human development and education. The excerpts do not communicate what is meant by perception. Therefore, I wish to point out that throughout our study perception is understood as sensory awareness to be interpretively transformed into conceptions which will serve as new bases for more objective and more discriminating perceptions and concepts, thereby increasingly sharpening and empowering perception and conception in the on-going process of development, learning, and personality maturation.

THE GENESIS OF PERCEPTION AND CONCEPTION

The child's perception of himself and of the world differs from the adult's perception. Understanding of this difference and the similarities will help us to better understand development and meaning of perception in the child and its place in a developmental sequence toward perception in adults.

How the adult sees the world.

As adults we may see the world around us on three levels of reality (Figure 1):

There is the level of "subjective" reality in which we deal with phenomena as they appear to us; as the individual subject perceives them, not as they are "objectively" and still less as they are "absolutely." This is observer-involved reality experience in which even phenomena such as illusions and dreams may have the character of reality.

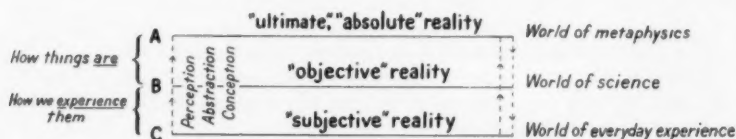


Figure 1. Levels of perception and conception of reality.

There is the level of "objective" reality, the field of scientific endeavor toward "objectivity." Objectivity is never fully accomplished, yet scientific thinking uses carefully developed safe-guards in its search for "truth" and "reality" to come as close as possible to the "objective" reality and to "objectivity" in its thinking.*

* For a discussion of those safe-guards and "objectivity" in perception see Allport,¹ especially pp. 14-57. It should be mentioned that there are scientists who say they are unconcerned with "reality" and "truth" but rather with description, prediction and control of phenomena.

There is the level of "ultimate" or "absolute" reality which is also "absolute" truth, beauty, love, value, etc. This is the realm of philosophical, or better, metaphysical thinking. On the highest level of this realm there is no empirical, demonstrable experience of reality. There is only speculative thinking and possibly "inner experience" (not to be confounded with *naïveté*).

All people, including the scientist and the philosopher, live on what we call the C level of reality experience, at least in varying proportions. This is the world of sensory perception, of everyday experience and common sense in which we perceive light, sound, smell, colors, forms, water, electricity, nature and people in a rather naïve way, namely as they appear to us. It is the world as we "have" it, as our "private," "subjective" world, a mixture of true and false, of knowledge and ignorance, of more or less objective reality and dream, of "appearance" and "true" character of thing and events. Not many questions are asked, little or no analysis is done. Things, events and people are taken at their face value. We call this attitude and world experience "naïve realism."

With the rise of skepticism and a critical attitude, we are on our way toward a more "objective" perception of reality: level B. Why do things appear as they do? Maybe they are different from the way they look to us? How are they? Can we distinguish how they are "objectively" from the way they appear, from the way we perceive them? Such an attitude toward the world may be called "critical realism" in contrast to the first discussed naïve realism. Critical realism is the sign of an educated person and specifically of the scientist who attempts to unveil the mysteries of nature and man through scientific methods and investigation. His methods are: observation; reasoning; refined use of logic, hypotheses and experiments; critical analysis of relationships, of cause and effect, and finally, synthesis. His aim is to arrive at "objective" perception or perhaps better cognition of reality and truth through denouement of "subjectivity," "appearance," chance and error. "The transition from the sense world [C in our diagram] to the scientific world picture [B in our diagram] amounts to a replacement of a disordered subjective manifold by a constant objective order, of chance by law, and of variable appearance by stable substance."* There is a long way to go from "C" to "B," from everyday experience to scientific "knowing," free of illu-

* Max Planck: "The Meaning and Limits of Exact Science." (In: Baumer, Van²) We shall find a parallel to this transition in the genesis of perception in the child and in our documentation of "C," "B," and "A" performances in our Gestalt Test which show the decrease of subjectivity and the increase of objectivity, thereby indicating progressive maturation and, as we postulate, readiness for school.

sions and deception. What happens on the way toward this aim is accumulation, integration, differentiation, condensation, and application of experiential knowledge in an individual person and with respect to our scientific body of knowledge. There is constant change and improvement from naïve to "objective," and what is considered "objective" and final today looks again naïve and preliminary in the light of new discoveries so that in spite of the most rigorous research endeavor and of many utterly remarkable results in "exact" sciences, a complete grasp of "true," "objective" reality and the laws that govern the universe has not been and, we must hasten to say, will never be fully accomplished on this level.

There are several reasons for this. While it is true that sciences accumulate experience and constantly increase and differentiate our body of knowledge, it is also true that in an attempt to arrive at "objective reality," they narrow down the field of inquiry in order to make data manageable on the basis of experimentation and hypothesis testing. This may happen due to the nature of scientific endeavor or due to lack of vision or owing to lack of adequate methods. Thus, there is the danger of piece-meal work, of increasing segmentation, of neglecting highly important areas and of losing perspective and unity. Furthermore, and most important: science cannot give itself the necessary solid foundation on which to stand. This is a "dangerously weak point." Science has no principle of universal validity to support its edifice. It lacks a "premise of unerring accuracy" without which "even the keenest logic and the most exact mathematical calculation cannot produce a single fruitful result."* Moreover, "science does not tell us where to go. . . . We are confusing the issue and demanding what we have no right to ask if we seek to learn from science the goals of human life and of organized society."⁹ (p. 34)

These are some of the reasons why the human mind strives beyond the assurance of "objective" reality as given in science toward a still higher and ultimate degree of reality, objectivity and truth. This is

* These statements are not just from some one who does not know any better. They represent the thinking of one of the greatest physicists of our time, Max Planck, whose quantum theory made him internationally famous. In his lecture on "The Meaning and Limits of Exact Science"² he said: ". . . in fact, if we take a closer look and scrutinize the edifice of exact science more intently, we must very soon become aware of the fact that it has a dangerously weak point, namely, its very foundation. Its foundation is not braced, re-inforced properly, in every direction. . . . Exact science is not built on any principle of such universal validity and at the same time of such portentous meaning as to be fit to support the edifice properly. . . . Even the keenest logic and the most exact mathematical calculation cannot produce a single fruitful result in the absence of a premise of unerring accuracy. Nothing can be gained from nothing." (p. 598)

the place where with compelling necessity metaphysics come into its own right (level A in our diagram).

Metaphysics is a philosophy underlying or superseding, if you wish, physics and other sciences. Empiricists will probably not accept this point of view. They are allergic to metaphysics, and so are positivists, pragmatists and materialists. They do not object to some sort of philosophy, but to the assumption of an ultimate reality "metà," that is "behind" what is accessible to direct scientific investigation. Again, I will let a qualified scientist, Max Planck,² take up the argument: "The only proper reply to this argument is, simply, that the word (behind) must not be interpreted in an external or spatial sense. Instead of 'behind' we could just as well say 'in' or 'within.' Metaphysical reality does not stand spatially behind what is given in experience but lies fully within it. . . . The essential point is that the world of sensation is not the only world which may conceivably exist, but there is still another world. To be sure, this other world is not directly accessible to us, but its existence is indicated, time and again, with compelling clarity, not only by practical life, but also by the labors of science. For the great marvel of the scientific world picture, becoming progressively more complete and perfect, necessarily impels the investigator to seek its ultimate form. And since one must assume the existence of that which one seeks, the scientist's assumption of the actual existence of a 'real world,' in the absolute sense of the word, eventually grows into a firm conviction which nothing can shake any more. This firm belief in the absolute Real in nature is what constitutes for him the given, self-evident premise of his work; it fortifies repeatedly his hope of eventually groping his way still a little nearer to the essence of objective Nature, and of thereby gaining further clues to her secrets." (p. 602) Other scientists of rank like Alfred North Whitehead and Werner Heisenberg take the same stand.

On these grounds it is understandable that metaphysics has been called the "science of sciences" or the "queen of science." Unlike other sciences, metaphysics is, in the thinking of Jacques Maritain,¹³ the "science" or "the intellectual intuition of being as being . . . in its pure and all pervasive properties; it is being . . . in the values and sources appertaining to its own intelligibility and reality. It is being attained or perceived at the summit of an abstractive intellection." (p. 29)

Thus, metaphysics provides the broad all-embracing frame of reference and content for "Weltanschauung" and "Lebensanschauung," for a compound world view and philosophy of life and existence. Since the earliest ages, metaphysics has been concerned not only with "universals" but with the "ultimate" nature and order of things, with "absolute" reality which is also absolute truth, beauty, love and jus-

tice. Metaphysics deals with being and "first principles," "first causes" of being, becoming and belonging, and with the "ultimate" purpose and goals of our existence. And because we can doubt our own thinking, epistemology as a branch of metaphysics examines the origin, nature and validity of knowledge, thereby providing foundations and instruments for the individual sciences. Perception of reality in the sense of levels C and B may enter realms of metaphysics but in the last analysis and in its highest levels, metaphysical thinking is speculation for which there is no scientific proof. This does not mean that such thinking must be unrealistic, nor must other forms of philosophy be unrealistic which have the character of "intuition," "inner experience," or "authentic feeling for existence and essence." None of these approaches should be confounded with naïveté. What we must be clear about is that reality experience in the sense of everyday perception and scientific or philosophical empiricism is superseded and transcended by belief or by faith, philosophical or religious. Against positivism and pragmatism, adversaries of metaphysics, it must be maintained that without some such belief and acceptance of irrationality, which again is not unrealistic, we cannot healthily live our daily life nor do any scientific "objective" thinking. Without belief and without hope for continuous progression toward the intelligibles of reality, the most critical realism and even agnosticism would lose its ground because we would have to doubt that man is able to doubt and to think and to have insight. We would make ourselves fools of our own reason. We would deny intelligibility. We would deny the possibility of a development from perception to cognition and toward ultimate "knowing," even if it will never be fully accomplished by human beings because we are not God, not pure Reason, not pure Faith and Perfection.

From this discussion it becomes apparent that in our reality relatedness manifold and intertwined transactional processes take place in two directions: reality perception, cognition and personality develop upward from "C" to "B" to "A" and down from "A" to "B" to "C" levels. Concretely: human thinking strives from everyday perception and common sense through careful examination of sense data to "objective" reality experience in the various individual sciences. Beyond that, it desires a unifying world view which can be very primitive and unstructured or highly differentiated, abstract and educated depending on the individual person and also the culture in which he lives. It is obvious that individual sciences contribute through their results and methods to philosophy and metaphysics and can, with the help of intuition and speculation, even lead to "inductive" metaphysics which fills the gaps in and between individual sciences and may unify our scientific world review. On the other side,

seemingly far-fetched metaphysical ideals, speculation and introspection can become very practical and applicable: they can serve as hypotheses and stimuli for future scientific verification and as guideposts for practical and moral living. Only through metaphysical transcendence can life become meaningful and promising. This holds true for the scientist, for the common man, and, to some extent, even for the child.

Briefly: in experiencing reality, there is progress from vague, disordered subjective world perception to highly objective experience of ordered reality. Perceptions and ideas develop gradually from low to high degrees of consciousness, from diffuseness in the naïve world picture toward more clarity and precise Gestalt in the scientific and metaphysical world, from little complexity and abstractness to degrees of complexity and abstractness which the layman no longer can understand. Thus, perception, learning and personality develop progressively through assimilation and conscious ordering and organization of experiences, through analysis, synthesis, insight and values as described above. These processes are the foundation stone of real education and of education for reality.

Whether it is the universe or a single object in the universe, "the relation between Subject and Object is the kernel of the problem of perception."⁸ (p. 243) This statement of another great scientist, Niels Bohr, is the axiom on which we based our outline of levels of reality perception and conception. It will serve us also as basis for the thoughts to be developed about the child's perception. Whatever is different and not yet attainable for the child, the adult's and the child's world view have one generality in common which we especially want to emphasize because it is the measure for developmental maturity and a rationale for our Gestalt Test: reality perception depends on the world picture which one has and this depends—within the limits of our culture—upon the developmental level at which he stands in his ability to perceive and to conceptualize reality. This is the starting ground from which we will turn now specifically to perceptual development in the child as it moves from subjectivity to objectivity, from little to increasingly more detailed Gestalt differentiation.

How perception develops in the child.

Perception develops through constant interaction between organism and environment, between inner and outer world. Essentially, it is an occurrence of manifold processes of global awareness and their increasing articulation into perceived Gestalten of greater or lesser consciousness and clarity. Some perceptions never come up through the threshold of consciousness, yet may become very im-

portant "building material" in the dynamic processes which shape a person and they may become instrumental in the formation of needs, dreams, illusions, wishes, concepts and the like.

In the first years of life child and world are almost a unity. The world is a diffuse, undifferentiated, syncretic totality which acts upon the child and is acted upon by the child in a rather global, diffuse way.^{12, 14}

Early in life (usually between ages two and five), the child's world and behavior undergoes a marked change. Up to that age sensorimotor experiences, tactile, visual, auditory perceptions, feelings, imagining, thinking were one undifferentiated or little differentiated physiological-affective (emotional) act or experience, an inseparable integrated whole characterized by its global feeling tone. Then, a slow but continuous process of generalized whole-emotion breakdown and articulation begins. The fused "oneness" opens up and a singling out of components takes shape. In other words, motor activities, sensations, perceptions, emotions, thinking, insight, etc.,

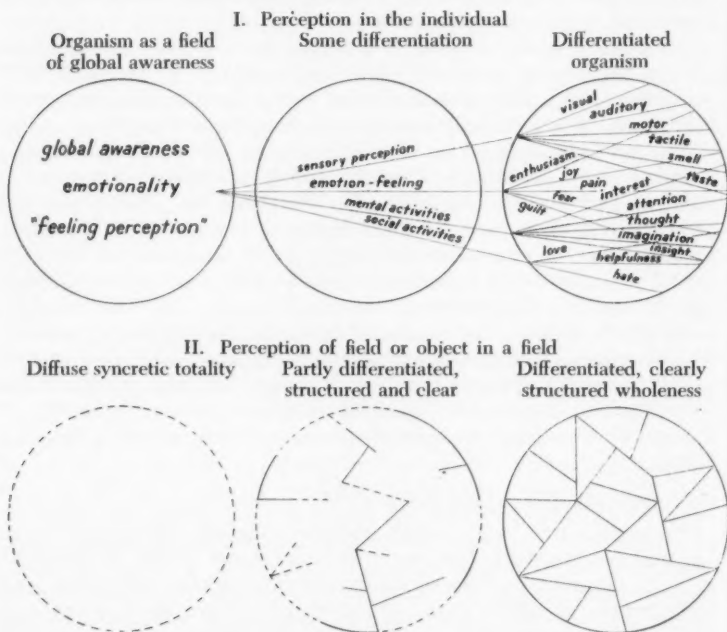


Figure 2. Process of perceptual differentiation.

gradually become distinguishable behaviors in their relative own right and purposiveness.

Figure 2 illustrates the meaning of this. Starting with the organism at the beginning of life which may be regarded as a field of global awareness, the earliest processes function with little or no discrimination. Then, "... basic biological awareness becomes selectively focused to include, and therefore to exclude) only that which is relevant in the mutliplicity of events ... this selective awareness becomes patterned perception as the individual learns to perceive what he is ready to recognize and respond to, and to impute meaning to what he perceives."⁷ (p. 212) Superseded and transacted experiences commence to organize and differentiate the organism very gradually until his behavior changes to the position where he has a great variety of reactions to specific situations. Emotionality is still present but no longer will be the one overall dominating force in the process of increasing organization, differentiation and structure.

This somatic and psychic process of differentiation brought about through previous transactions between the organism and his sources of experience brings forth a change in the child's outlook both toward himself and toward the universe. The child's universe was first very diffusely perceived and became then an "animistic," "physiognomic" world. People, animals, plants, clouds, fire, sun, stones, were "animate"; they had the character of living beings. And, like human beings, some were good and bad simultaneously, some were good now, bad later; some were friendly, some were hostile; some smiling at one time and threatening at other times. Somewhere between the ages of two to five, in most cases around the age of three or four, physiognomic perception begins to give way to a more realistic and more objective attitude. The high degree of fusion between inner and outer world, between subject and object, between person and thing, loosens up. The path thus opens toward an increasingly realistic perception of the self and of the objective world around him.

It is necessary to point out that these differentiating changes within the child and in his perceptions of the external do not happen at once and at equal rates in all behaviors and life areas. Rather, that undifferentiated oneness and diffuseness may disappear with relative quickness in one area and still continue in another one from which it will vanish only very gradually or for some people not at all. Some individuals carry their illusionistic, imaginative, fantasy and dream-like world attitude into their adult life and remain unrealistic and unfit for a healthy life; others, like artists or inventors, in fact, many creative persons are able to incorporate those features into their productive life and make creative use of them in conjunction with a realistic mature life attitude. The carry-over is even a prerequisite

for truly creative living. What we want to stress at this point is that changes in the child's internal and external life which begin somewhere between the ages of two to five and are somehow completed between the ages of six and twelve, are important steps toward increasing differentiation and objectivity in the perception of reality and in the child's maturational process.

This developmental stage is the preparatory stage for a child's beginning readiness for school.

Some main characteristics.

The main characteristic feature of this new phase of development would seem to be the increase in perception of similarities and differences of things and situations and the growing ability to perceive, to analyze and to synthesize forms. Surely, perception is still complex-holistic, but with increasing neuropsychic differentiation, the child becomes increasingly more able to pay attention to

- a) size, form and color of objects
- b) differentiation within a field or object
- c) proportion and frequency relations

Point "a" is adequately documented and further illustrated by the child's preferred activities in nursery school and kindergarten.

Point "b" needs further elucidation. Obviously, more than in the preceding phase, the child is now able to pay attention to and produce parts of an object or a situation. However, there is still no complete clarity regarding the perceived parts or features of a field or an object in the field, visual or auditory. The most obvious features may be clearly perceived while others are still blurred, again others blended together, often implemented or interpreted through the child's fantasy. This is the area which needs clarification. The progress in perceptual development consists in the expanding "objective," that is, true-to-reality part of the child's perception, while at the same time, fantasy perception, inaccuracy and "subjectivity" in general decrease. Undifferentiated wholeness decreases in visual, auditory, and sensorimotor perception as well as in the child's language or creative art production; the child's discrimination increases.

Point "c": proportion and frequency relations become more apparent. The child increases his abilities in seeing proportion and frequency relations. Out of these experiences he develops the foundations for number concepts. This is more than just mechanical and routine counting or reciting of rhymes with number words. Such things are done by the child in a verbal and rather meaningless way already at an early age. What we intimate is the development of a concept of 2, 3, 4, and 5 through meaningful experience with numbers as part of the child's encounter with the quantitative world. The

child had an opportunity to observe that things exist singly or repetitively, for instance; there may be one egg and there may be five eggs, there may be one apple, there may be three apples, which gives him the idea of frequency. Or he may observe that there is one father and one mother which gives him a different foundation for a number concept. He has observed that things exist in plurality such as dishes, knives, forks, chairs. These are simple plurality concepts, but they enable further discrimination. There are two parents although they may appear as father and mother. There are two hands although they may exist singly as one right hand and one left hand. There are further steps in discrimination: father's car and most cars have four wheels, some may have six or more. The child has five fingers on each hand. Everybody has. Through observations of this type, the child develops a concept of 2, 3, 4, 5 and learns how to use those concepts in a meaningful fashion.

Whether this would always happen in this sequence is open to question. It is thinkable that one child acquires the meaning of 4 prior to that of 3, if this child has had more experience with fours than with threes. Research work in France, Belgium, Germany and Austria has indicated, though, that life experiences produce additions to the meaning of numbers and tend to give usage of the addition of a new number to the generality of the number concept at an average rate of about one number a year. In general, a three-year-old child would have a concept of 2, a four-year-old a concept of 3, a five-year-old a concept of 4, and a six-year-old child would have a concept of 5.*

There are other important characteristics of this phase of development. Because they are less relevant for a discussion of our problem at hand and in relation to our test, we mention only the fact of their existence. But perception of form, color and size of objects, the child's increasing ability to see and to analyze parts of a whole and the perception of proportion and frequency relations with the accompanying development of number concepts are decisive helps for the child in conquering and penetrating his environment. These are new instruments or categories which along with increasing understanding of causal relations enable the child to bring order and meaning into the world around him through the discovery of similarities and differences, and through the constructive organization of his life

* See Descoeudres,⁵ *Le développement de l'enfant de deux à sept ans*. Paris, 1922. Chapter VIII: "Développement de la notion de nombre. Tests de calcul Decroly-Degand," especially pp. 246 and 282. There may be cultural differences, but Filbig,¹¹ Beckmann,¹¹ Karl Buehler⁴ and others made principally the same observations in Germany and Austria as Descoeudres and Decroly-Degand did in France and Belgium.

TABLE 1—PATTERN OF PERCEPTUAL DEVELOPMENT

I. General Characteristics

- Increasing skills: tactile, smell, sensorimotor, visual, auditory, language
- Increasing ability to learn, to penetrate the world around and to take possession of it
- Increasing ability to perceive size, form and color, to analyze and to synthesize
- Increasing ability to recognize similarities and differences
- Increasing ability to conquer the world of quantity and numbers
- Increasing self-control
- Increasing ability to pay attention and to concentrate
- Increasing concept formation: from signals, signs, symbols to silent or verbalized concepts
- Increasing realism and objectivity
- Increasing de-emotionalization (decreasing subjectivity)
- Increasing rationalization, generalization, abstraction

II. Stages of "Praeganz" of Organization or Structure; Degrees of "Pronouncedness"

1. Person Perception: perception as process		
Global awareness	Some differentiated sensitivity	Differentiated sensitivity
Undifferentiated "feeling perception"	Partly differentiated	Differentiated into "objective" perception, sensations, feelings, emotions, thinking, insight
Highly imaginative	Less fantasy, some control	Controlled fantasy
High degree of subjectivity	Less subjectivity	Minimum subjectivity
Minimum objectivity	Some objectivity	High objectivity
Little consciousness	More consciousness	High consciousness
2. Object Perception: perception, reproduction, production of objects		
Primitive, diffuse wholeness	Some structure	Structured wholeness
Undifferentiated	Partly differentiated	Differentiated
Little or no details	More details	All details
Unclear	Partly clear	Clear
No relation (field to object part to part part to whole)	Some relation (field to object part to part part to whole)	All related (field to object parts to parts parts to whole)
III. Readiness for School (resultant of I and II): process of successful development from primitive holistic to differentiated holistic perception and personality structure		
Unready	Partly ready, partly unready	Clearly ready

experiences. These new categories are most important for his learning and his progressive maturation.

The degree to which a child possesses qualities derived from these categories of developing experience and the extent to which he uses them at a given level in his transactions with reality, is indicative of development and, as we claim, of his readiness for school.

This summary of background information enables us to develop thoughts to the point that will give us assistance in understanding why we use our Gestalt Test for estimating readiness for school.

Table 1 gives a formalized presentation of patterns of perceptual development in the child. It summarizes what we said explicitly or implicitly about perceptual development in terms of general characteristics (I) and in terms of progressive stages of "Pregnanz" of organization or structure, both within the individual and in relation to a field or to an object in a field (II). Readiness for school (III) in this sense can be understood as the process of successful development from primitive holistic to differentiated holistic perception and personality structure.

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THE SEARCH FOR NEW FRONTIERS

T. M. STINNETT*

Our experts are projecting a future for America and the world that beggars the imagination. Space travel at incredible speeds; luxury hotels on the moon; pills to control the size and shape of the human body; earth-bound travel at 2000 miles an hour; driverless automobiles, foolproof and accident-proof; fresh water from the seas in superabundance; food from chemical, and vegetables, enough aplenty for the projected world's population of six or seven billion souls; the mailman in the form of an earth satellite which, by means of electronics, will receive and deliver a letter to any place in the world in a matter of minutes; even that speech, one of these days, will not be necessary to communicate—one will only need to think and project his thoughts electronically.

We must think big in terms of the kind of country we are going to live in in the future; in terms of population alone the developments which are coming in the next quarter-century are of extreme significance. In America alone, they tell us, these things are possible by 1980: In 25 years our population will reach 250 million, an increase of 46 per cent. Urbanization of our population will be predominant. One continuing city will stretch for 50 miles north of Boston, 700 miles south to Norfolk, Virginia. Cities will be scattered over the landscape with their growing suburbs in almost unbroken symmetry. In Michigan, Illinois, Indiana, Ohio, and Wisconsin, new, greatly enlarged industrial empires will cluster around the completed St. Lawrence Seaway. The Gulf Coast, from Florida and on to California, will be teeming with people. New sources of water will open up the entire desert area of the Southwest, creating a new region of perhaps 50 million people. The annual number of births, which is now at 4.3 million will probably rise to 6.5 million. The school-age group under 20 will increase by 71 per cent; there will be a doubling in the number of 18 to 21 college-age-going youth; the retired group over 65 will increase from nine million to 25 million. These developments will mean greater demands on education and a continuation of the shortage in our working groups, because those in the working years of 20 to 65 will increase by less than 40 per cent; whereas this group now

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represents more than one-half of the total population, it will be less than half of our population in 1980.

By the early 1980's we will have nearly 80 million in schools of all kinds. This will mean great expansion of both private and public colleges. It will mean a drastic increase in the number of community or two-year colleges. General education will continue to be emphasized, but at the top of the educational years there will be tremendous pressures for specialized education, scientific and technical training. A whole new area of adult education will come into its own. There is no way to avoid the assumption that there will be some type of significant federal participation in school support through the university.

As for our economy, the experts predict that the gross national product, which is now at \$440 billion, may reach as high as one trillion dollars in 25 years. Where there are now four million businesses, there will be six million. Factory production will be more than doubled. Family spending, on the average, will more than double—from \$300 billion to \$700 billion annually. There will be more inflation. Prices are predicted to rise about 50 per cent in the next 25 years. Job opportunities will grow proportionately, some fields increasing more than 200 per cent over present employment. Already many industries are devoting a major portion of their production to goods which were not even in existence five years ago. This trend will continue in the future. Some industries are now predicting that three-fourths of their profits in the 1980's will come from things that are not even in existence today. Two-hour flights from New York to Paris or Los Angeles will be common.

So, "There's A Great Day Coming" two years ago now changes to "There's A Great Challenge Coming"—the challenge of the search for new frontiers. One aspect of this search, insofar as education is concerned, is to gird ourselves so that a free society, without resort to regimentation of its schools, can meet the technological and ideological advances of Russia and outstrip her. This is going to be difficult, but it can be done. The difficulty lies not so much in the potential of America's schools meeting this challenge as it does in the danger of stampeding the American people toward a shortsighted view that our schools must be regimented to meet this challenge, or toward the idea that an overt, sudden revolution in our system of education—a system which has served us well, extraordinarily well, regardless of what the critics say—is dictated by the circumstances. To engage in a numbers game with Russia, on her terms, would be fatal. It must not be obscured that Russian education is geared to serve the state, ours to serve the individual. There is a gulf as wide as the world in these two concepts.

The great task is refinement and improvement in our educational system; all of the loose talk about a revolution in education is just that. In a free society the educational system inevitably mirrors the society—its values and its aspirations—in which it exists. When it ceases to do that, it is no longer a free system; and its society will not long remain free. To revolutionize education, therefore, society must first be revolutionized. This is not an easy or a quick task. For this reason many of the contemporary pronouncements are far from realistic. One who has been most generous in the suggestion of panaceas has proposed a small committee of scholars to fix our educational standards and determine who should be awarded diplomas or degrees. This might work in another kind of society, but not in ours, however competent the committee might be. I frequently have letters, particularly from college people, who inquire what is the point of conferences like this. The implication is that the experts already know the answers. This is doubtful. But, assuming that they do, would the answers be accepted? The plain truth is that decisions in education in this country are not made that way; and if they were, we would like the method even less than our groping-for-answers method. As long as we retain a free educational system in a free society, a lot of palaver is essential to its proper functioning.

One recalls vividly the aftermath of Pearl Harbor. Then, as always when something goes wrong in society, the blame is easily assessed upon the schools. Some of our leaders were quite vocal and quite emphatic in their judgment that the schools had failed; "that the schools had produced a generation of drugstore cowboys"; and that they must be completely overhauled to meet the challenges of authoritarianism. There were severe criticisms of the lack of instruction in the areas of science and mathematics. There were charges of a lack of discipline in our schools which made it seem unlikely that the products of our schools would be able to compete in a military way with the regimented youth of the dictators. Of course, the record of those war years speaks eloquently for itself. The adaptability of the American system of free schools was never more impressively demonstrated than during World War II, in their quick shift to producing technicians. A total of something like 12 million technicians were trained for the war effort by the American school system. This is one of the outstanding educational achievements in all of history. This was done without goose-stepping regimentation of our educational system.

The danger now is that we may be stampeded into giving emphasis to an unbalanced system of education. At least we may be pressured into a skewed system, the intent of which would be to enable us to survive technologically, even to triumph, only to be faced by a threat

of the new barbarism. These are words easily spoken, but they contain a warning which the American people, and certainly American educators, cannot afford to discount. Ours is an indigenous system of education, and to try to transplant the Russian system here, or to mimic it in any great degree would be a catastrophic mistake.

What, then, are the new frontiers in education we must seek?

THE FRONTIER OF A NEW AND ENLARGED SCOPE FOR EDUCATION

The basic, indispensable new frontier in education which we, as a people, must seek is that of a drastic revision and enlargement of our concept of the role of education in our society. The present—and the future—demand a critical rethinking by the American people of the place education must have in our hopes for the future, even in the naked fact of survival. This inevitably means a drastic overhauling of the machinery, the scope, and the content of education. It means a totally new, greatly expanded view of the purposes our schools are to serve; and it means giant new reaches in our thinking about what must be done to achieve an educational system commensurate with the immeasurably larger demands of our society. The American people have had warning after warning about the dangers of obsolescence in their thinking and support of the schools. This time there is no escape from the reality of the situation.

As we ponder this dilemma, our provisions for the general welfare—highways, public buildings, airports, air traffic control, and our schools—are all far behind the essential needs. In a very real sense, as a nation we live in an old house. Our highways, our public buildings, our airports and air traffic control are glaringly inadequate for our vastly enlarged population. It is like a family which built a house expecting one child, in which six people now live. That is a particularly apt analogy for our schools. A current shortage of 150,000 classrooms, according to Secretary Folsom of the U.S. Department of Health, Education, and Welfare; and a need to construct new classrooms each year for about 1,250,000 added children, to say nothing of the burgeoning needs of the colleges, leads one to ponder when the American people will face up to the facts. In the top boom period of our history, if we are unwilling to bring the general welfare abreast of the needs, what is necessary to force us to face reality? Perhaps Sputnik will do this for us.

Not only in buildings but in terms of our treatment of teachers and in terms of access of the capable to higher education, enlarged concepts are imperative. And there is no way, with the federal government pre-empting three-fourths of every tax dollar, to escape the mandate of devoting an increased portion of the national income to education.

We are compelled to rethink the cost to the nation of school drop-outs, long before the realization of innate potentials. Mortality rates of about 30 per cent in our high schools and about 50 per cent in our colleges, with at least 40 per cent of capable high school graduates never reaching college campuses—these are costs in terms of wastage of precious human talents which, really, is what the nation cannot afford. Consider, for example, the educational fruits of the G.I. Bill of Rights. Between 1945 and 1955, the operation of this law provided in professional areas in dangerously short supply something like 240,000 teachers, 100,000 lawyers, 65,000 doctors, 150,000 engineers, and 750,000 scientists—a total of nearly 1,500,000 desperately needed professional personnel. These, it may be assumed, were for the most part youth whose higher potentials would have otherwise remained undeveloped. Who can calculate in dollars and cents the value of their enhanced contributions to our society?

THE FRONTIER OF HIGHER QUALITY IN EDUCATION

A quarter-century hence, the continued growth of automation means a double shift in vocational outlook toward (1) a drastically increased consumption of professional personnel, and (2) personal services which, in large part, will be at professional levels. Thus, all along the line, education and teaching must function at successively higher levels of knowledge, skills, and insights. The first implication of this new frontier of higher quality in education is that the caliber of teachers and teaching must be stepped up radically. This can only come about as the result of a new attitude on the part of the American people toward teaching. Brains, intellectual ability must take on a new sense of value and be nurtured and revered in our society, especially in our classrooms. The day when the popular slogan "anybody can teach" must give way quickly to the notion that only the heavily endowed, in terms of brains, personality, leadership, dedication and preparation, will be permitted to teach. The day of the inept, the inadequate, the cast-off, the incidental teacher is drawing to a close. Teaching has to become, whether some powerful groups like it or not, the number one profession—in terms of intellectual competence, prestige, and remuneration. To do this, the American people must face up to the acceptance of teaching, in fact and in deed, as a professional process at the highest levels.

Just now we are hearing a lot about Soviet education, with thinly veiled implications of criticism for our system. In particular, we are told in glowing terms of the rigors of the system, the demands upon the time of the students, and higher standards of achievement, and about the operation of double shifts in the schools. One may guess that we shall hear little about how the average load of Russian

teachers has been reduced from 33 in 1927 to 28 in 1940 to 17 in 1956-57.¹ Here in the United States, with an average load of 27 and real loads in most city elementary schools of from 40 to 50 pupils per class, the exhortation is to increase the present load. This matter of teacher load is the chief repellant to a teacher—the back-breaking, soul- and brain-wearying teaching and extra teaching load. This repellant surpasses dissatisfaction with inadequate pay. One needs no statistical proof to sustain this thesis. All one need do is talk to teachers.

In a recent report, Jewett² reviews 15 years of informal study of this problem, through contacts in the field with teachers and former teachers. He reports that almost without exception able teachers and former teachers are disillusioned with respect to teaching, disillusioned by working conditions that prevent them from doing the job they were prepared to do—teach. What are these conditions? Too many pupils, too many classes, too much clerical work, too much handling of drives, collecting lunch money, ticket sales, too many committee meetings, too many papers to grade, too many community endeavors—to the point that a teacher's very soul is not his own. And yet there is griping because this killing regime does not extend over 52 weeks in the year.

A class load of five to six per day, with a total pupil load per day ranging from 175 to 250 or more, is common. There simply is not the time to do more than go through the motions of teaching. Individual work is impossible; participation in discussion is at a minimum; all-important written work is scanty, totally inadequate for thorough grounding in English. Jewett points out, for example, that if a teacher would like to require of each pupil, as a minimum, written work amounting to about three typewritten pages a week, the burden is incredible. With a pupil load of 190, the teacher would be reading and marking, in a school year, a total of 20,500 pages, more than 4,000,000 words, equivalent to 40 books of 100,000 words each.

Certainly aids and teacher helpers can be valuable. Certainly technology and TV can be helpful. These can contribute immeasurably to the stepped-up quality and enrichment of teaching. But not if these are to be used as an excuse to get cheap teaching services by adding on still more of a pupil load. The notion that is being widely propagated with great furor in the slicks and in the press about using these devices to eliminate 100,000 qualified teachers, or whatever number (and some claims would triple this number to be eliminated), and to save so many billions of dollars a year in the cost of teaching services, belongs to the obsolete concept of an inferior role for our schools in maintaining our position in the world.

Jewett suggests that the total pupil load for one teacher should

exceed not more than 80 pupils per day, if we want to step up the quality of education and retain our competent teachers. But, he points out that the class load is only part of the story. Another significant part is the back-breaking load of clerical work. He lists 29 separate clerical tasks, all time-consuming and hard work.

Nor, one suspects, will there be much comment about the report that the Soviet teacher works three hours a day, six days a week, or a total of 18 hours a week in formal classroom work, as compared to the average work week of the U.S. teacher of 32.3 hours in work at school and a total work week of 47.9 hours.³ The base pay of the Soviet teacher is nearly four times that of the general Soviet laborer, whereas the United States teacher's pay is less than two times that of the U.S. laborer. Nor is there much comment about the fact that the Soviet teacher may work an additional 18 hours, for which he is paid overtime—grading papers, preparing assignments, or engaging in what we call extra-curricular duties. The talk is that we ought to load our teachers still more in order to make up for the gap in supply and demand for qualified teachers, and in order to reduce the cost of education to a point that the people will be willing to support it. Nor will we hear much about the average salary of the college professor in Russia of \$18,000, as compared to that in the United States of \$5,400, or a range of averages from \$4,790 to \$8,010, according to rank.

We cannot predict that qualified teachers will be induced to take teaching jobs in sufficient numbers. We can predict that enough qualified teachers can be turned into our population by the colleges and universities. A recent sampling study by the U.S. Office of Education⁴ reported, for the school year 1956-57, that 20 per cent of beginning teachers quit after the first year; that 50 per cent planned to teach only five years or less; that 7.5 per cent of the entire teaching staff left the profession in 1956-57, for all reasons. Two basic causes ascribed were salary (median for beginners, \$3,600) and lack of preparation (20 per cent were emergency certificate holders, 13 per cent were teaching in fields for which they were not prepared to teach, and 14 per cent had not completed the bachelor's degree).

And now a new factor enters the situation with the expanding demands of colleges for new teachers. In 1955-56, about 14 per cent of new college teachers employed came from the pool of high school teachers. Now, colleges are beginning to face the same realities which have been confronting the elementary and secondary schools and finding the same adverse factors operating—overloading, inadequate pay, low prestige in the public mind. For years, certain influential and vocal influences have been telling the American people that we could have plenty of teachers—if the preparation was made more

scholarly, if professional education courses were eliminated, if certification requirements were abandoned; indeed, if almost anything were done except to face the realities of cost and providing satisfactory working conditions. I am afraid many college people lent silent, if not vocal, assent to such theses but colleges are now finding that the same prerequisites obtain to getting and keeping good teachers as do for the elementary and secondary schools.

The public has simply counted comfortably upon the dedication of teachers. But a teacher cannot be dedicated if he never enters teaching. And the record shows that nearly 40 per cent of teachers who prepare for elementary and secondary teaching—in some high school fields as high as 70 per cent—do not take teaching jobs the fall after graduation; that the percentage of all new Ph.D.'s who take college teaching jobs is about 40; and the proportion of those who have a prior commitment to teaching who actually take a teaching job after receiving the Ph.D. reaches barely 60 per cent. Of course, the percentage of defectors in some fields runs much higher, just as it does in the high schools.⁵

Certainly one cannot discuss the imperative of increased quality in education for the future without commenting upon growing pressures to make education more and more exclusive—the growing pressures for adoption of vigorous selection techniques, especially for admission to higher education. These pressures arise, of course, from a variety of motivations. Some have to do with apprehensions about the rising costs of our educational enterprise. Some arise from the apparent or real indifference of many who are enrolled in high schools and colleges by virtue of compulsory school laws or the compulsions of social and economic factors. And some arise from the conviction that it is impossible to establish and maintain decent educational standards so long as the process is diluted by the presence of the inferior, the uninspired, and the laggards. Then there is a minority which do not believe, and sincerely so, in the sustained education of the masses.

Of course, everybody is for the cultivation of the intellectually gifted, but not as a class set aside, not in special schools upon which a certain status is conferred.

Of course, it cannot be denied that our present system, whereby we avoid rigid selection based on certain predetermined bases, is an expensive one. It is perhaps the most expensive educational system ever devised. That has been known all along, but it has been accepted as necessary to assure even-handed treatment of all members of our society. But its many fruitful by-products justify that expenditure. One great battle that the free society has always had is to resist the urge to mimic a more ostensibly efficient system. This is true in

education. We can stand a lot of inefficiency and a lot of waste of time in our pursuit of fairness for all. Selection at any level is a hazardous undertaking. People have potentials that emerge at different times because of a variety of motivations, vocational and others. And we could quickly wash down the drain many of the fine people capable of fine achievements in our society by extreme forms of selection. The proponents of the new conservatism would argue that they are talking about selection based on demonstrated intellectual ability, through testing devices not related to social classifications or economic conditions. Their sincerity on this point, of course, is unquestioned. What would happen, however, is that such a system, in the long look, would tend to give great weight in the selection processes to economic, political, and social factors.

Among the recent efforts to discredit our system of mass education, in favor of a more selective system, a lot of foolish claims have been made. Among these is the charge that our public high schools are inferior and that they produce only mediocrity. Data, of course, prove nothing regarding the relative quality of public and private high schools. There are simply too many variables to establish a case either way. Good and indifferent schools doubtless exist in both types; and talent is where you find and challenge it. But the data ought to lay the ghost of the claim of inherent inferiority in our system of mass education in our high schools; that the products of this system are inevitably scarred with mediocrity.

This by no means indicates a viewpoint that increased selectivity in American schools is to be ruled out. In fact, there is no escaping that selection must be made more definitive at almost every level of our educational system. This will not be selection to save dollars, *per se*, to identify only the gifted. Its purpose will be to make education more democratic, to identify diverse talents and to get people into the kind of instruction and into the kind of courses that will nurture each of those talents. And through this process the gifted will emerge. This kind of discriminating selection is the only sure means of preserving the comprehensive institution; one of the effective means of creating the climate in which sloppy work and indifference will not be tolerated; and the only sure means of avoiding social stratification through our schools. This kind of selectivity will help assure that the standards of education, the quality of teaching will be stepped up at every level of our schools.

Perhaps what is needed most of all—to bring our schools to the needed quality level—even above wise selection procedures, is the creation of a climate in which hard work is honored, where mind stretching is respectable, where the straining to meet the challenge of one's best is the accepted thing. It cannot be claimed that such a

climate now widely exists. This is a difficult thing to achieve, amid a public attitude that gives too little support to it, but that we must find the way to do it seems obvious.

THE FRONTIER OF CREATIVITY IN EDUCATION

Lyman Bryson⁶ has recently said, in effect, that we have democratized appreciation in America. Our next step is to democratize creativity. The great frontier for education here is to make fruitful the added time which will accrue to Americans in the years ahead. The estimates are that, on the average, Americans will have nearly one-half of all their hours to spend as they see fit (work will consume about 20 per cent; sleep, 33 per cent; and leisure, 47 per cent). We tend to call this free time "leisure time," implying that it is to be spent in lolling and in physical and mental vegetation. If so, we Americans will quickly embrace the old saw about the progressive school in which a sorely bored child said to the teacher, "Do we have to do today only what we want to do?" This added time, unless it becomes a new frontier for the fruitful cultivation of education, may not prove to be an advance in Man's search for the full, the whole life.

Thus, education must turn the minds of Americans toward creative realizations—in art, in music, in literature, in all the realms of the mind's intuitive and instinctive reaches. If education does not search out and explore this inviting new frontier, then we may be sure our mass media, under the pressures of commercial exploitation, will manipulate this time to the glories of brand names in beer, cigarettes, and gadgetry. The chief problem of life is what to do with time. Nobody ever has enough of it. The wise use of it is life's ultimate achievement.

One of the greatest dangers of mass education is the development of the mass mind. Only an education which directly and vigorously seeks to cultivate the latent and innate creativity of the human being will be able to avoid this danger. Already the American people are being mass motivated to an appalling extent. Imperceptibly, but inexorably, the American people are being opiated into a regimented pattern of conformity socially, economically, and politically. The mass mind is not only being made respectable but as a badge of acceptability. The "pitch" in Washington, where everybody is supposed to think only that which the superior above thinks, to have only the convictions which trickle down from the summit, through a horde of pitch-seeking sycophants, is beginning to permeate industry (that boasts endlessly of the powers of rugged individualism, but increasingly becomes intolerant of that quality among its employees).

Motivation Research (MR) is a relatively new, heavily financed

science, the purpose of which is to find out what makes the human being act as he does under certain conditions. Some have harshly accused MR of the prostitution of the social sciences, psychology, and psychiatry. Applied to selling, it is essentially a probing into the deepest reaches of human personality, to exploit fears, anxieties, aspirations, prejudices, neuroses, even love. MR is being applied to the manipulation of human beings for profit's sake. This manipulation constitutes a serious threat to human welfare. Because the same techniques can be applied to other and baser purposes. Education must tackle this problem, expose its methods and build defenses against it or, as a people, we shall find (indeed we are already finding) man's most sacred inner citadels invaded and profaned; or we shall find ourselves rapidly becoming a nation of robots, helplessly regimented to believe that the biggest of lies is a shining truth or helplessly regimented to pursue devilish actions all in the name of defiled goodness.

Our mass media, of course, are here to stay. They represent great advances in human progress. But they have their evil potentials, as almost every new invention of man has. Things are neutral; it's their use by men that give them character—good or evil. With the discovery of fire, man could have made this new thing a devastatingly destructive force in the world. But he learned to control it. In a free society where we abhor state-imposed censorship, the one basic control of the staggering potentials of our mass media is education in critical values. This is, inescapably, an elemental new frontier for education—the frontier of creativity.

NEW FRONTIERS IN TEACHER EDUCATION

These suggested new horizons in education—scope, quality, and creativity—all somehow come back to teacher education. The search for new frontiers in education begins with the search for improved methods in the education of teachers.

In the past, the regional conferences sponsored by the National Commission on Teacher Education and Professional Standards have generally been used as a follow-up of the previous national conference sponsored by the Commission, to channel the findings of those conferences to state and local leaders of the profession throughout the country. In recent years, state TEPS commissions have developed effective statewide conferences for this. Thus, the 1958 series of regional conferences can be devoted to preliminary planning for the forthcoming National TEPS Conference. In June, 1958, the Commission will devote its National Conference to the theme, "The Teacher Education Program," or a related one. This will be a major effort to develop some common grounds and an acceptable working philosophy for future improvements of teacher education programs, in which the

Commission hopes to involve all major organizations representing the academic fields and education interests, the state education legal authorities, and elementary and secondary school personnel. In addition, national associations representing specific teaching fields will be invited to join as cooperating organizations.

It would be naïve to assume that answers to all of the problems in teacher education can be found in one conference, or that perfect agreements can be reached. There will always be pronounced differences of opinion among people in education and among laymen concerning the purposes of education. While we do not have hope of reaching an all-time settlement of present controversies about teacher education, we do believe that we can reach working agreements and develop a framework for sympathetic and cooperative effort—within which framework there can still be wide disagreement, wide controversy, wide discussion—all designed to seek out the weak spots in the armour of teacher education, repair them and go ahead with an ever-improving, ever-evolving process.

Thus, the 1958 regionals, we hope, can serve to help materially in structuring the 1958 National Conference. The six areas listed in the agenda of these conferences are not intended to be all-inclusive, but certainly they can be envisioned as essential parts of the teacher education program. Basic principles would be considered as minimum essentials which the profession would judge as being indispensable in the development of an adequate teacher education program. Basic issues would involve those problems or elements about which there cannot be hard-and-fast convictions because of the lack of sufficient evidence or agreement. We hope that the study groups can derive clear, succinct, definitive statements which can serve as guidelines for detailed study next summer. It is to be expected that the groups studying a given area in the six regional conferences may show wide diversity in their recommendations.

If we are going to think big about education, as all the signs indicate we must, it is inevitable that we start thinking big about the processes by which teachers for our schools are prepared, from the kindergarten through the university. There is much in the recent disputations that indicates that we have not been thinking big about teacher education; we have been thinking parochially. We have not been thinking in terms of getting a job done so much as we have been thinking in terms of prerogatives and prestige and status; as much as we have been thinking about finding culprits or justifying one type of institution and condemning others.

If we are to think big in teacher education, all of us must drop some cherished shibboleths that we have helped to perpetuate. For example, the claim that there would be plenty of teachers for our

schools if the professional education requirements were abolished. People have repeated this over and over in complete sincerity and good faith without examining the facts. If professional education courses are a major cause of teacher shortages one might reasonably ask why colleges now are faced with the same serious shortages, since, generally, no professional requirements are imposed upon college teachers? Yet the causes of the shortage of college teachers are much the same as the causes for shortages of teachers for elementary and secondary schools—the imbalance in the population pools of the 1930's and the 1940's, the inability of teaching to compete in remuneration for the services of qualified people, the tendency to overload teachers to the point of intolerance, and the relatively low status of teaching in our system of values. We have been unable to discover any considerable evidence to sustain the assumption that abolition of professional requirements would yield any significant number of new converts to teaching. The weight of what evidence we have seems to be on the other side—seems to indicate that the elimination of professional requirements would tend to make these shortages much worse.

The pool of general college graduates has yielded a significant number of recruits in many places. But they have been people willing to meet the professional requirements. To our best knowledge, in practically all of the states an extreme effort to woo the general college graduate or graduates of other professional schools into teaching has been relatively unproductive. In some instances, where such graduates were accorded the same rights as fully qualified teachers, the effect has been to worsen the situation by causing the migration of qualified persons to states where their professional preparation and rights are respected.

For nearly a year now, through the Press and Radio Division of the NEA, we have been sponsoring brief public-service announcements on radio and television, calling attention to the sustained teacher shortages and inviting interested persons to write for information. I suppose that we have received somewhere in the neighborhood of 20,000 letters. I would estimate that perhaps 20 per cent of these letters come from young people still in high school who are interested in exploring the possibilities of a teaching career. Perhaps 5 per cent come from mature college graduates who are still young enough to change their occupations. The remaining 75 per cent, and I am sure this is not an exaggeration, come from people who are hopeless prospects for teaching—people whose ages range from the 40's to the 70's, who had some college education but who were never satisfied with the occupation they had. A surprisingly large number of these

letters are from people who have had no college preparation at all, who are quite advanced in age, and who simply are disillusioned with commercial work and want to find a safe, quiet, unhurried retreat in teaching.

Of course there are weaknesses in the certification process, in the prescription of both professional and subject-matter requirements. The process will probably never be a perfect one. The members of the National Association of State Directors of Teacher Education and Certification are currently engaged in a nationwide study to strengthen all aspects of certification. They are seeking simplification of the requirements, greater validity in the process of identification of the qualified teacher, and the means of achieving national reciprocity in teacher certification. Democratic procedures for the full participation of all segments of the profession have been established in almost all states. If glaring weaknesses continue in state certification requirements the profession will have a large measure of the blame. The quality and adequacy of these requirements will be, in large measure, determined by the extent of responsibility the profession is willing to assume.

Any profession worthy of the name must insist upon effective autonomy in the process of determining the competent and rejecting the incompetent. Many people take the view that such autonomy can only be exercised if the legal authority is vested in the profession. But the teaching profession can exercise effective autonomy through the advisory machinery which the respective state legal agencies provide.

In recent years, the discussions of certification have been almost altogether critical. It is high time that the other side of the picture be made known to the public. With all of its admitted weaknesses, legal certification of teachers has been a constructive influence in the constant upgrading of standards and the constant elevation of the quality of teaching services. Despite scathing criticisms of subject-matter specialization requirements, state certification has been the chief influence in assuring competency to perform assigned teaching responsibilities, the chief barrier—during sustained and critical teacher shortages—to wholesale abandonment of teaching field requirements.

With respect to the teacher education program, I should like to make some brief observations.

The first observation is that there will be teacher education as such. To take any other viewpoint would be to deny teaching the status of a profession and reduce it simply to an in-and-out occupation, to which those who have completed some level of general education would be willing to condescend to serve until they could find some-

thing better to do. It is true that teaching at the moment is too much of an in-and-out occupation, but that must be remedied and teaching made a lifelong career.

The assertion is quite popular that a teacher should be a broadly educated person. This is quite true. But he must be more than that, as doctors or engineers or the members of any other profession must be more. If we stop with the assumption that a teacher must be a well-educated person, then it logically follows that teacher education is not significantly different from general education. But the gap between a well-educated person and a competently prepared teacher should be as great as between a well-educated person and a competently prepared lawyer. I use the term "should be" to indicate that with adequate preparing programs this would be the case. And to get adequate programs, upgrading is required in both academic and professional aspects of the preparation of teachers.

To produce broadly educated teachers and professionally competent teachers will require much longer preparation periods than is now the case. At the present there are four types of teacher education programs. There is (1) the undergraduate program (or the four-year program) in which both the academic and professional aspects are integrated; (2) a fifth-year program completed subsequent to the four-year program; (3) a five-year program (commonly called the four-plus-one) in which professional work is provided on top of the liberal arts degree; and (4) a five-year program, in which both academic and professional work are integrated.

Although the trend at the moment is toward the second—the fifth-year program following the undergraduate program—I believe there will be a rather rapid development of the third—the four-plus-one program—as quickly as we can begin to get a reasonable balance in teacher supply and demand. Moreover, in time the six-year program will become quite general. Of course, these steps will not emerge all at once. There will be a combination of them side-by-side. But more and more the four-plus-one will emerge, then the five-plus-one.

Why these predictions? First, as I have said, it is not possible to get the broadly educated teacher and the competent professional in a four-year program, and to continue the assumption that we can will inevitably continue present conflicts. Second, teaching will begin to develop a system of pre-education in the liberal arts program, as has been the case with other professions. Third, the growing pressures for greater specialization will eventually mandate the sixth year. As a matter of fact, this pressure is already evident in some high school teaching fields.

Careful selection, specific and scholarly preparation, and life-long dedication—these constitute the acceptable routes into every recog-

nized profession. Indeed, the basic distinguishing mark of all respected professions is the completion of a prescribed college or university program of preparation. If no prescribed program exists, then no profession exists. The teaching profession is sensitive to this basic concept and will vigorously support it. The fact that many weaknesses in the process admittedly exist is not any argument at all for abolition of the process, but for reform and improvement.

There probably would be very little argument about the foregoing statement. The argument arises over how to do it. Particularly would argument arise over proposals which apparently are aimed at diluting the process to the extent that the professional aspects of teacher education would be nullified or eliminated. Already there has been much so-called experimentation, the basic premise of which seems to be that the professional aspects of teacher education can be effectively done in a casual sort of on-the-job learning process. This is a phase through which other professions passed in their infancy. All have now eliminated this inadequate approach in favor of completion of a prescribed curriculum. Of course, many of them retain aspects of the learning-on-the-job process, but at the apex of the preparing program and only after completion of a prescribed program, and only under vigorous and competent supervision, not as practitioners but as learners, as apprentices or interns. Of course, there are deviates who can take many short-cuts to professional preparation, not only in teaching but in any profession. But the danger is that in catering to the occasional, gifted deviate, in making exceptions for the exceptional, we simply open the doors to applying these short-cuts to all candidates for teaching. This would be fatal; and one is inclined to the view that the more concessions we make to such deviates the more we open the doors to the ultimate abolition of professional preparation of teachers.

One of the great needs of teacher education is refinement and improvement of the program of laboratory experiences. Too many existing programs give only lip service—and superficial lip service at that—to such experiences. They are offered reluctantly and casually, only because state legal requirements mandate them. Not enough time, typically, is allotted; facilities are inadequate; and supervision is cursory, if any is provided at all. Obviously, here is a great area of responsibility for the profession in the public schools. With greatly increased enrollments in the future, the public schools must provide comparable increases in the number of student teaching stations. There are many administrative and other problems involved here. But we must solve these. And here is a warning: If we do not move vigorously as a profession to solve this problem, there will inevitably be increasing inroads of learning-on-the-job during full-time teach-

ing. Already one state legislature has enacted a law providing for the acceptance of a prescribed number of years of teaching experience in lieu of formal student teaching.

The second observation is that there will be professional schools of education or strong departments of education in all institutions preparing teachers.

Just now there are campaigns on some campuses to remove or diffuse the administrative and coordinative functions of these units. The assumption—an assumption that seems reasonable at first glance—is that the respective academic departments should be in better position to supervise the preparation of their candidates for teaching than is the professional school or department. As a general rule, as indicated by experience, this step would result in such diffusion and lack of coordination of teacher education as to destroy the program. Teacher education in such institutions would go in many directions. The probability that a central core of essential professional competences would be provided is doubtful. Moreover, the recruitment of capable young people to prepare for teaching would become a helter-skelter, nobody's-business sort of thing; would result in steadily diminishing returns in terms of numbers of candidates for teacher education. It is no accident that—as significant as have been the increases in college and university enrollments in recent years—the increases in enrollments in teacher education have been greater. This is a direct result, in large measure, of the existence of strong professional schools of education on our college and university campuses. Once the thesis is accepted that this function can be, or will be, performed by a multitude of departments or schools, teaching will become an accidental sort of endeavor, and preparation for teaching will become an incidental, left-handed, by-product process which would yield a steadily diminishing number of candidates, to say nothing of the probable inadequacy of preparation.

Some of these attacks on campuses, apparently, are stimulated by faulty interpretations of recent developments in teacher education. One of these developments is the steady trend, in most areas of the nation, toward converting single-purpose state teachers colleges into multiple-purpose institutions. Many have interpreted this as a trend toward the ultimate elimination of the professional aspects of teacher education. There is very little evidence to support such a conclusion. The evidence is that this trend is resulting from two factors: First, the pressures of ever-increasing college enrollments are forcing states to choose between two alternatives—(1) the conversion of existing single-purpose institutions into more general types, or (2) the building of additional campuses. Naturally, many states are choosing the former, because it represents great savings in terms of the cost of construction of new buildings and the hiring of new staffs.

The second factor, often overlooked, is that teacher education is now in the process of assuming its rightful place as a respected discipline in higher education, alongside other professions, to the extent that it is no longer necessary to maintain separate single-purpose schools for this purpose. Teacher education, as such, beginning with the preparation of elementary teachers, consisting at the start mostly of elementary and secondary school content plus great emphasis upon methodology, contemptuously referred to as "trade-school techniques," was rejected as an unfit subject for higher education. Thus, a struggle ensued over a period of a century or more to establish the claim of teaching for professional status. So long as the preparation requirements for elementary teachers consisted of only meager college preparation, with most of the emphasis being upon methodology, it is understandable that higher education was reluctant to admit such programs. As a matter of fact, this tendency in our society to view the preparation of elementary school teachers as a bag of tricks with little formal learning beyond the secondary schools, or even in earlier days beyond the elementary school itself, has been the greatest single obstacle to the professionalization of teaching and to the acceptance of teacher education as a respected discipline in higher education.

We are now moving out of that era. A total of 37 states now prescribe the bachelor's degree of preparation for elementary school teachers; and within a few years this requirement will be universal. This evolutionary process has been true of most of the other professions. At long last, we are reaching the time in American higher education when teacher education will become an integral part, a respected part, of the work of colleges and universities. The adoption of five- and six-year programs will contribute to this development. Quite naturally, where we get hung up in such a proposition is in the assumption of an inevitable dichotomy as between the broadly educated person and the professionally educated person. The concept of broad education of the teacher meets resistance from nobody. Yet this is a persuasive argument.

This persisting assumption that there is some sort of a strange irrevocable dichotomy between general and professional education has been too long perpetuated. There is danger now that we shall apply this sane fallacious notion about a non-existent dichotomy between science and the humanities. Scientists can be, and usually are, broadly educated people, too. There is no real dichotomy between professional and general education, except where we make one by our attitude. Both are general and both are professional education, and each supplements and complements the other.

The third observation is that teacher education must become a matter of all-institution concern.

This follows logically the preceding point; to some, I suppose, it would seem to be in contradiction with it. The preceding point does not assume a monopoly of concern for the preparation of teachers by the professional education unit of a college. If such a monopoly were to exist, or were to develop, then it would be logical to return to the separate, single-purpose institution for teacher education. But that, it is evident, will not be the case. The trend, as previously pointed out, is in the other direction.

Thus, it is imperative that machinery must be developed upon campuses by which there is direct and real, not token, cooperative planning of the teacher education program. This can be done, is being done in many institutions; and wherever it is being done, as a general rule, there is vigorous support and mutual respect among all elements for teacher education. This cooperative participation must also be applied to the formulation of state certification requirements.

The fourth observation is that we are in great need of reform in the content aspects of teacher education as well as in the professional aspects.

The teaching profession should be equally concerned for the reform of the non-professional education part of the preparation of teachers as for the professional aspects of it. Let us not embrace the fallacious notion that all the weaknesses exist in the professional phases of teacher education. Poorly planned teacher education programs are as often poorly planned in the academic as they are in the professional aspects.

There are at least three purposes which the academic aspects of the preparation of teachers should serve. First, of course, is that the product should be a well-educated person. The second is to contribute to the performance of the teacher's professional tasks. And the third is to provide a suitable background for the maximum value to be derived from professional courses. The relationship of the usual academic concentration to the areas the teacher will actually teach, the relationship to an appropriate balance in general education, need critical examination. The assumption that the typical academic major will suffice needs restudy.

Perhaps one reason why professional courses are often judged as being ineffective is the inadequacy of pre-academic preparation to equip prospective teachers to gain deep insights into the social setting and objectives of the school and the learning process. These pre-education courses might be classed in the area of the sociological, psychological, and physiological foundations of education—human biology, anthropology, sociology, and psychology.

Just now there is considerable agitation of the point that what is being taught and the textbooks in the high school subjects are

obsolete. These charges give particular emphasis to the fields of science and mathematics. To what extent this lag exists, I do not know. But whatever the extent, there are certainly direct implications for reform in the subject-matter preparation of teachers. And this need mandates a radical revision of the kind and quality of in-service courses which will be required for teachers in the future. In some respects this need is so critical as to supersede the need to reform pre-service programs.

A fifth observation is that perhaps the most pressing need is for re-examination of the teacher education program at the graduate level.

Obviously, as I have said, we cannot get in a four-year program either the concentration in the subject field or in professional courses that teachers must have. This means that mandated five- and six-year programs will become increasingly common. Such a development will demand a critical examination of graduate offerings. It is not an unfair criticism to say that graduate programs for teachers, like Topsy, "just grewed up," resulting in part from discovered needs and in part from salary differential pressures. The time is here for carefully planned programs designed to serve the specific needs of teachers. Too, it is not an unfair criticism to say that too many of the existing programs permit too much concentration in education and too little concentration in the teaching field. This practice developed largely as the result of two factors: (1) The first graduate programs were for school administrators, where heavy concentrations in professional courses were justified. Later, when graduate work for teachers became common, they pursued the established program. (2) The second factor is the reluctance of academic departments to provide suitable courses for teachers and to adjust prerequisites. Thus teachers were forced into graduate programs in education. One of the science organizations recently surveyed graduate school offerings for teachers and found these generally inadequate. Fortunately, there are well-defined trends toward the development of graduate programs designed to enhance the competence of teachers in their specific teaching fields. And there is some evidence that state certification requirements are beginning to emphasize that a major portion of the work for a master's degree will be pursued in the teacher's endorsed field. Here, I am referring of course, to the fifth-year program, completed after initial service.

A sixth observation is that the preparation programs for teachers at all levels must become more alike.

This is dictated, first, by the necessity that all teachers be broadly and richly educated persons. Second, it is dictated by the necessity for greater articulation among all school levels. There are other compelling reasons but these two will suffice.

One of the great mistakes we may make in attempting to assure adequate preparation in science and mathematics, which is now being demanded, is to assume that this can be done by giving exclusive attention to the high school curriculum and teaching. This is not enough; the elementary school curriculum and teaching must be similarly revised. The elementary school teachers must be equipped with deep understanding and insights in these fields. Here is where nascent interests of children are nurtured or those interests tend to atrophy.

The similarity in preparation must take place in the general education core, the professional core, and to a lesser extent perhaps—but with greater similarity than now exists—in the specialization area. The general education core should, of course, be identical; the professional core almost, if not completely, identical; and the specialization much nearer identical than is now the case. The view is becoming popular that the professional core should tend to become more like that which presently is provided for elementary teachers; that the specialization area for elementary teachers should tend more to concentrate in content fields. If such a trend is to be accelerated, it would seem that the so-called professional-content subjects—the area of elementary teachers' specialization (music, art, juvenile literature, etc.)—will tend to be offered by the academic departments rather than by the professional departments.

The seventh observation is that there is evident and pressing need for achieving some degree of standardization in teacher education programs.

This is, admittedly, a controversial point. We have always distrusted standardization in education. As a people we believe in the creative power of pluralism. At the same time, we recognize and accept the necessity of unity with regard to certain values in our political system—the Constitution, the Bill of Rights, and others, constitute a central core to which we all give allegiance; and within the framework of which we still retain the right to pluralism. This is the kind of standardization in teacher education for which I am pleading. Certainly there must be a central core of minimum essentials to which we all subscribe. If there is not, then there cannot be a professional concept of teacher education nor a teaching profession. Just as this nation could not have become a nation and cannot now endure very long if a central core did not exist. It seems to me that the trend toward five- and six-year programs will constitute favorable conditions for this need.

Perhaps I have used the wrong word—standardization. Perhaps I should say that there is a critical need for agreement upon some basic components and procedures in teacher education; that these

should be universal; that within this minimum essential framework there will be room for pluralism and institutional autonomy in how it provides these essentials. Surely 150 years of history have taught us something about teacher education. Surely we have sufficient experience to justify the insistence upon some procedures. If we do not, then every conceivable kind of practice, every measure of diversity will continue to bar the way to the real professional education of teachers. I know—the plan to wait until all the evidence is in is an appealing one. But to do that means that we never start. Other professions have built themselves upon a few basic assumptions, dropping these as research and new evidence indicated their lack of validity. The time has come, in my judgment, to identify the basic assumptions and values in teacher education and to hold steadfast to these until new evidence justifies the adoption of new concepts.

CONCLUSION

All the signs—as best as I can evaluate them—point to the appropriateness of this moment in our history of seeking new and richer frontiers in education.

If we may judge the present and the future by history, it is quite probable that we are now living in one of the golden ages of man, and the present intellectual ferment is but a prelude to a still greater age. All such ages of the past—of Pericles, the Renaissance, and the Elizabethan—were periods of intense intellectual questioning and groping; and none of them seemed to contemporaries as markedly happy or contented periods. All were marked by intellectual excitement, self-criticism, new ideas, new creations, and the sense of expectancy that the concept of new directions would gain common acceptance. They were times of venturing, of dissatisfaction with things as they were; they were not—as ours is not—times of the static in environment and thought.

The fact that our own times are criticized as anti-intellectual may be the best evidence of the extent of our intellectual questioning. This new age will be different in that it will be cosmopolitan, not localized. Perhaps the great threats to the realization of this new age are the fragmentation of knowledge, the emergence of intellectual parochialism, the development of specialized semantics in the specialized fields—jargons that become unintelligible to those outside the particular priesthood. To maintain pluralism, within an essential unity, is the great problem.

Thus, the search for new frontiers is “open sesame” to a new and greater age. There are frontiers of gadgetry and technology and science which are imperative for future man’s material and physical well being. But these frontiers fall far short of the needs of the

whole man. There are frontiers of the mind and the spirit—new frontiers—which man in his hunger for fullness of life, in his quest to inhabit the upper reaches of the human spirit, must seek. This frenzied but fruitful moment in our history is prelude to the anguished search for new frontiers in education. And new and better processes for the education of teachers, inevitably, become the dynamo of that search.

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A HUMAN RELATIONSHIP PROGRAM FOR DIETETIC INTERNS*

MURIEL GINSBERG WAGNER
AND ALBERT S. DREYER

During the past three years, The Merrill-Palmer School, the University of Michigan Hospital, Ann Arbor, and Henry Ford Hospital, Detroit, have been developing a cooperative program intended to give dietetic interns from the two hospitals insight into the relationship of food and people. Since an understanding of human relationships is an educational goal shared by both hospitals and Merrill-Palmer, the program for dietetic interns provides them with an educational experience in this area which takes into account their specialized background and interests.

Consistent with Merrill-Palmer's teaching philosophy, all sessions are conducted by group discussion procedures and reflect the multidisciplinary setting of the school. The discussion leaders not only have broad knowledge of the areas they represent, but insight into the field of dietetics as well. They suggest ideas for analysis by the group and strive to communicate an accepting and supporting attitude to the students.

As the program now operates, the dietetic interns from both hospitals enroll at Merrill-Palmer for a five-day period of observation and discussion. Before enrolling they participate in a preliminary orientation period at their own hospitals, when they meet the program coordinator and hear a brief explanation of the structure and function of the School and how the week's experience seeks to implement the goals of their professional training. This discussion serves as a common base of information for the first session at Merrill-Palmer. By sharing personal feelings, ideas and experiences related to the program objectives, the interns plunge into the group discussion process and sample the atmosphere of the entire week.

Further integration into the Merrill-Palmer setting is achieved by release of the interns from all responsibilities at their hospitals during the week and by cooperative living with full-time Merrill-Palmer students in the student residences. The directors of the internships neither request nor receive evaluations of the performance of indi-

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vidual students during the program. Their insight and understanding in this matter contribute much to release the students for free expression and participation in the program and for maximum benefits from it.

The over-all goal of the program from the beginning has been to present the concept that food is never "fed alone," but in addition serves as a vehicle carrying emotions and attitudes. The concurrent philosophical concept is that any comprehensive feeding program implies a knowledge of human development and behavior. These concepts are demonstrated through observation and discussion, each intern and staff member interchanging techniques, ideas, and insights with professional people from other disciplines.

These goals are implemented through observations and discussions outlined here. It should be kept in mind, however, that discussion occurs before, during, and after observations, as well as in the discussion sessions.

I. Observations—content

A. Direct observations of children in an eating situation and factors affecting reactions to food and mealtime. Three periods are scheduled for observation of well children in the nursery school. These groups were selected because of the excellent observation facilities and equipment (one-way vision mirrors), the opportunity afforded to observe a wide range of behavior—parent-child, group, sibling, and adult-authority relationships; and, finally, the somewhat more overt expression of behavior during the nursery school years. These observations are developed sequentially, as follows:

1. Observation of the noon meal, each intern focusing on a specific child and the techniques adults use with children at mealtime. This experience is integrated into discussions A and B, below.
2. Guided observation from the time of the child's arrival at nursery school through the lunch period. The accompanying discussion stresses the nursery school as a group setting, the relationship between the family and the school, the role of the adult in the group, and similarities and differences in the behavior and development of well children.
3. Independent observation of an individual child from time of arrival through lunch period. The student is provided with an observation guide, specifically designed to aid in focusing observation on the principle that eating is a part

of total behavior. Material from this observation is used by the student to participate in the multidisciplinary developmental study of the child (Part II, C, following). The discussion is led by a specialist in early childhood education.

- B. Food history interview. The food history of each child includes an evaluation of dietary calculations obtained from estimated and recorded food intake in terms of: the child's likes, dislikes, and familiarity with foods; observation of mealtime behavior in the nursery school which reflects total behavior; parental attitudes toward food and mealtime in the home; the family mealtime pattern; and background material on the family. Data for this study are gathered in an interview between parent and nutritionist; the interview also serves as an educational tool for parents. Data obtained in the initial interview are later interpreted to the parent. The interns observe the child in the nursery school and, before observing an initial live interview between parent and nutritionist, are oriented to the forms used in the interview. After the observation, the interview is analyzed and discussed in the intern group. Comparative materials from other interviews are presented. Material from the interview is integrated into the multidisciplinary developmental study of the child (Part II, C). This session is led by a nutritionist.

II. Discussions—content

- A. Observation as a tool of learning. The value to the dietitian of effective observation is explored as a device for learning about behavior, interpreting behavior, and communicating this knowledge to other members of the hospital team. Though the dietitian is not a trained observer, she can learn to sharpen her ability through learning the use of objective and descriptive terminology, having a definite purpose for observation, and becoming aware of her own personal biases and prejudices. The evaluation of student observations (Part I, A, 1) serves to point up these uses of observation. This discussion is led by a research psychologist.
- B. Common goals and purposes of feeding programs. In this discussion, led by a nutritionist, the application to other age groups of feeding procedures followed in the nursery school⁴ is considered. The historical development of such procedures is traced to show the growth of knowledge of child development and to illustrate the integration of nutrition information with other disciplines.

- C. Multidisciplinary developmental study of the child. The sociological, psychological, and physiological aspects of development of the specific children observed by the interns are discussed by professional persons, each contributing his insights to the total view. Each student contributes to the discussion and in turn is expected to gain an integrated developmental and behavioral picture of the child. This discussion is led by a specialist in early childhood education, with staff members in psychology, nutrition, physical growth, child development, and early childhood education participating.
- D. Meaning of food. Through a critical analysis of a report on nutrition education with the foreign born, the symbolic meanings of food are demonstrated. An understanding of the relationship of food to such factors as cultural, family, status, and moral values, as well as role concepts, love symbols, and religious meanings, is stressed as essential for effective nutrition education. The discussion is led by a cultural anthropologist.
- E. Problem of changing food attitudes. The implications to the patient of a request to change his food habits are explored. The focus is on the feelings of dietitian and patient and how these feelings affect their relationship. In this context, the meaning of the success or failure of the dietary regimen to both dietitian and patient is analyzed. Psychological interviewing principles that can be applied to the dietary interview are demonstrated through role playing. This discussion is led by a clinical psychologist.
- F. Relation of growth to nutrition. This discussion, led by a nutritional biochemist and a specialist in physical growth, presents biochemical and growth and maturation studies as means of evaluating nutritional status and needs. The use of the Wetzel Grid, Iowa height and weight curves, and skeletal assessments is presented in a case history to show both status and progress of the child, as well as allowances for individual variability. The problems and conceptualization involved in collecting data for growth and metabolic studies are explored.
- G. Professional relationships and interrelationships. A psychologist leads the discussion based on the premise that the professional person in dietetics and nutrition should recognize that this field is also concerned with human relationships. Thus it requires not only insight into personal values but also an understanding and appreciation of the attitudes and feelings of others. Discussion is tied specifically to the various

interrelationships of the dietitian's professional life, namely, with patients, employees, and colleagues.

- H. Overview of week's experience and application to the hospital setting. In this session, application of the over-all goals of the program to the hospital setting is discussed by students and staff. Each aspect of the program is examined critically by the students so that the staff may better help them to integrate knowledge about human relations from other disciplines into the field of dietetics.

In a one-week program, little more than an operative point of view can be offered. However, the effectiveness of such a program is increased if ideas and experiences are carried from the hospital to the program, and, in turn, those gained from the program are carried back to the hospital for further discussion and application. To facilitate this carryover, the Merrill-Palmer staff and the directors of both internships concerned have developed cooperatively an observation guide for student use at the hospital, both before and after participation in the program. The guide is specifically designed to help the intern focus on the role that food plays in the total behavior of the well adult (the cafeteria customer), the physically ill adult, and the child patient. It is not a finished product, but like the program itself it must be evaluated constantly and is expected to improve with experience.

EVALUATION OF THE PROGRAM

An evaluation to determine the effectiveness of this program was undertaken with both objective and subjective measures.

Objective Measure: Attitude Scale

To make an objective evaluation of the effectiveness of the program, it seemed necessary to devise some measure of attitudes toward food and the part food plays in people's lives. To this end a tentative scale of thirty-seven items was developed. Some of these items represent beliefs consonant with or favorable toward the goals and objectives of the program. Others represent beliefs at a tangent to or unfavorable toward these objectives.

For each item the person filled in one of the symbols SA, A, U, D, or SD, representing respectively the following responses: strongly agree, agree, undecided, disagree, or strongly disagree. Each item was scored on a scale from 1 to 5, with a weight of 5 arbitrarily given to answers in the favorable direction. A person strongly agreeing with an "unfavorable" item, for example, was given a score of 1 for the item. A person strongly agreeing with a "favorable" item was given

a score of 5 for the item. In this way an item score and a total score, consisting of the sum of all the item scores, were obtained for every person. The scale was pretested with 26 dietetic interns who attended the special program in 1954-55 and 20 junior and senior students in home economics who attended regular sessions at Merrill-Palmer in the same year. Using the scores from this preliminary administration of the scale, there emerged 21 items which showed a high relationship with the total score.¹ These constituted the final form of the scale.

SCALE FOR MEASURING FOOD ATTITUDES

This is a study of what professional people think about a number of questions concerning people and their relation to food. You may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement, you can be sure that there are differing opinions about many of the statements. Since this is a completely anonymous questionnaire, the material will in no way be used for evaluation.

1. People complain more about food when they are in the hospital than at home.
2. Children should be allowed to vary their food intake from day to day.
3. Children should learn to eat all foods at a very young age.
4. Patients on a therapeutic diet should rigidly adhere to such a diet.
5. Physiological mechanisms govern a child's choice of foods.
6. Dietitians should prevent children's food jags.
7. The quantity of food a child eats measures his like of the food.
8. Desserts can never replace the food value of meat and vegetables.
9. A child who is throwing his food is trying to gain attention.
10. A child with a sallow skin, dull hair, and poor complexion needs a better balanced diet.
11. Foods, such as candies and pastries, should not be offered to the young child.
12. Children who learn to like all foods at a very young age have fewer nutritional problems as adults.
13. Careless or extravagant buying results from a lack of nutrition education.
14. Weight and height should meet norms for a given chronological age.
15. The use of the fork and knife should be taught at a very early age.
16. The attractiveness of the food determines how much a child will eat.
17. Obese people have deeper psychological problems than people who are not obese.
18. The presence of a parent in the hospital at mealtimes is too disturbing to the child to be permitted.
19. Children learn food habits from their families.
20. The dietitian's personal food likes influence those of her patients.
21. It is too difficult to consider individual religious and cultural beliefs concerning food in a hospital feeding situation.

¹ For readers interested in the more technical details of the item analysis, item score-total score correlations were calculated. Only those items that significantly correlated with the total score at the 5 per cent level were accepted. For $N = 46$, the correlation had to be greater than 0.291 or less than -0.291 .

Design of the Study

The attitude scale was administered to 25 dietetic interns who attended the program in 1955-56 (program group). It was also administered to 24 dietetic interns who were not in the program (non-program or control group). The scale was administered to each group twice—once at the beginning and once at the end of a week. The scale was first administered to the program group on the morning they arrived at Merrill-Palmer, to ascertain their attitudes before the program began. It was administered again on the last afternoon, to determine the effects of the program on their attitudes.

The scale was answered anonymously. Each group member was given a number, placed at the top of the questionnaire, so that the investigators could match the two from each person.

Immediate Effects

The first step in evaluating the effects of the program on the attitudes of the dietitians was to gauge the level of the scores before they began the program. Table 1 indicates that the mean scores of the two groups were similar at this time. That is, there was no significant difference in the mean scores of the two groups on Test 1 before the program. (White test¹ was used to test significance of difference.)

TABLE 1

Mean scores of dietitians who took and who did not take program, on first and second tests of attitude scale

GROUP	MEAN SCORE		DIFFERENCE*	SIGNIFICANCE OF DIFFERENCE†
	Test 1	Test 2		
Program	63.80	73.72	9.28	<0.001
Non-program	66.33	64.96	-1.42	

* Positive score indicates increase in direction of favorable attitudes.

† White test¹ used.

A look at the scores of each group after the program and, more specifically, the amount of change in a direction favorable to the objectives of the program, indicates the effectiveness of the program. After the program, the mean score of the program group was significantly higher than that of the non-program group.

Moreover, the score for *every* dietetic intern who took the program changed in a positive or favorable direction; while the scores of 14 of the 24 dietetic interns who did not take the program changed in a negative or unfavorable direction (Table 1). The mean score of

the program group was almost 10 points higher on Test 2 than on Test 1, whereas the mean score of the non-program group was lower on Test 2 than on Test 1. It would seem, then, that this human relationship program did have some impact on the attitudes of the interns.

Effects Over Time

To determine meaningfully the change in attitude brought about by the program, a retest of the scale was made after sufficient time had elapsed to allow the dietitians to go back to their hospitals and immerse themselves in the work of their internships. The scale was re-administered, accordingly, to all the program group six to eight months after they left Merrill-Palmer.

Two questions concerned us here. One dealt with the absolute and one with the relative standings of the members of the group. In other words, we wished to determine: (a) whether the dietitians whose attitudes were most favorable at the close of the program still had the most favorable attitudes when the later test was made; and (b) whether any significant shift or change in an unfavorable direction had occurred in the attitudes of the interns in the six- to eight-month period.

To answer the first question, a rank order correlation was calculated between the scores of each member of the program group at the time they finished the program and at the time of retest. The correlation was significant ($\rho = 0.61$, $P < 0.01$), indicating that those dietitians whose attitudes were most favorable when the program ended tended to remain most favorable later.

To answer the second question, the mean scores of the group at these two times were compared. The mean score at Test 2 was 73.72; at Test 3, 71.75. Using the Wilcoxon signed rank test,¹ no significant difference was found between the means of the group on the second and third administration of the scale. Thus, the group's attitudes remained at about the same or more favorable level over the six- to eight-month period.

These findings support the conclusion that the human relationships program did alter meaningfully the attitudes of the dietetic interns toward a more understanding and positive approach to the problems and patterns people have concerning food.

Subjective Measure: Student Evaluations

A subjective measure of results was made from a compilation of the students' evaluations, written anonymously, of both individual sessions and the total program. These evaluations were categorized into areas consistent with the goals for the program.³ Statements from the students exemplifying these categories can be found in the original article.²

1. Fostered recognition of individuality.
2. Aided awareness of the relationship of other disciplines to the field of dietetics.
3. Emphasized the importance of the relation of food to the total behavior of the individual.
4. Developed insight into personal and professional motives and appreciation and understanding of these feelings in others.
5. Offered experience in the use of group discussion techniques and the observation process as an effective tool of communication.
6. Developed an awareness of the influence of culture and environment on food attitudes.

SUMMARY

A short program in human relationships for dietetic interns has been described along with a study of the effectiveness of that program.

To evaluate the program objectively, an attitude scale concerning food habits and patterns was administered to two groups, one taking and one not taking the program. Although there was no difference in attitudes between the groups at the outset, there was a significant difference at the close of the program. Every member of the group taking the program changed her attitudes toward a more positive and understanding point of view, while a large proportion of the group that did not take the program either did not change or changed toward more negative or less understanding attitudes.

A retest of the program group six to eight months later showed that their attitudes remained at the more positive level.

A subjective measure of results was made from samples of evaluations written anonymously by the dietetic interns taking the program. These evaluations, categorized into areas consistent with the program goals, also indicated favorable results.

From the objective and subjective evaluations, this program was concluded to be effective in significantly changing the attitudes of the participating dietetic interns.

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Book briefs

LOGIC AND PSYCHOLOGY. Jean Piaget. Translated by W. Mays and Frederick Whitehead. 48 pages. Basic Books New York, 1957. \$1.50. [Published originally by Manchester University Press, 1953]

This small book is an outline of Piaget's application of formal symbolic logic to the understanding of the thought of the child. Piaget feels that the developing structures of thought correspond to certain logical categories and that an understanding of this correspondence constitutes an important area of theoretical psychology. This book attempts to bridge the gap between formal logic and the psychology of thought.

FAMILY AND KINSHIP IN EAST LONDON. A Survey of the Institute of Community Studies. 232 pages. Free Press, Glencoe, Ill., 1957. \$5.00.

What are the effects of residence in a suburban housing project upon the relationships between kin? To gather data around this question, the writers studied over a period of three years the pattern of family life of a sample of working class residents of Bethnel Green, a neighborhood of London, England, and then that of a sample of former Bethnel Green residents who now live in the Greenleigh public housing project. Contacts of married men and women with own parents during a 24 hour period; contacts of married men and women with own mother and with mother-in-law during one week; proximity of residence of married children to their parents are some of the kinds of information this lucid and rich report supplies about both Bethnel Green and Greenleigh residents. Ample and clear tables are supplied throughout the text. The methods used to select the samples, and interview schedules are included in appendices.

RAND, SWEENEY AND VINCENT'S GROWTH AND DEVELOPMENT OF THE YOUNG CHILD. 6th Ed. Marian E. Breckenridge and Margaret Nesbitt Murphy. 548 pages. W. B. Saunders Co., Philadelphia, 1958. \$5.50.

In their Preface to this volume the authors point out the advances in this field since publication of the first edition in 1930 which have made necessary an increase in the number of references from 165 to 932. They emphasize that "changes in focus and in practices in child development have occurred which are reflected in the changes in this textbook in content and in organization. . . . Using these basic concepts the authors employ two approaches to the study of the child, namely those of status and progress, with particular emphasis upon the processes involved in the progressive changes observed as a child grows and develops."

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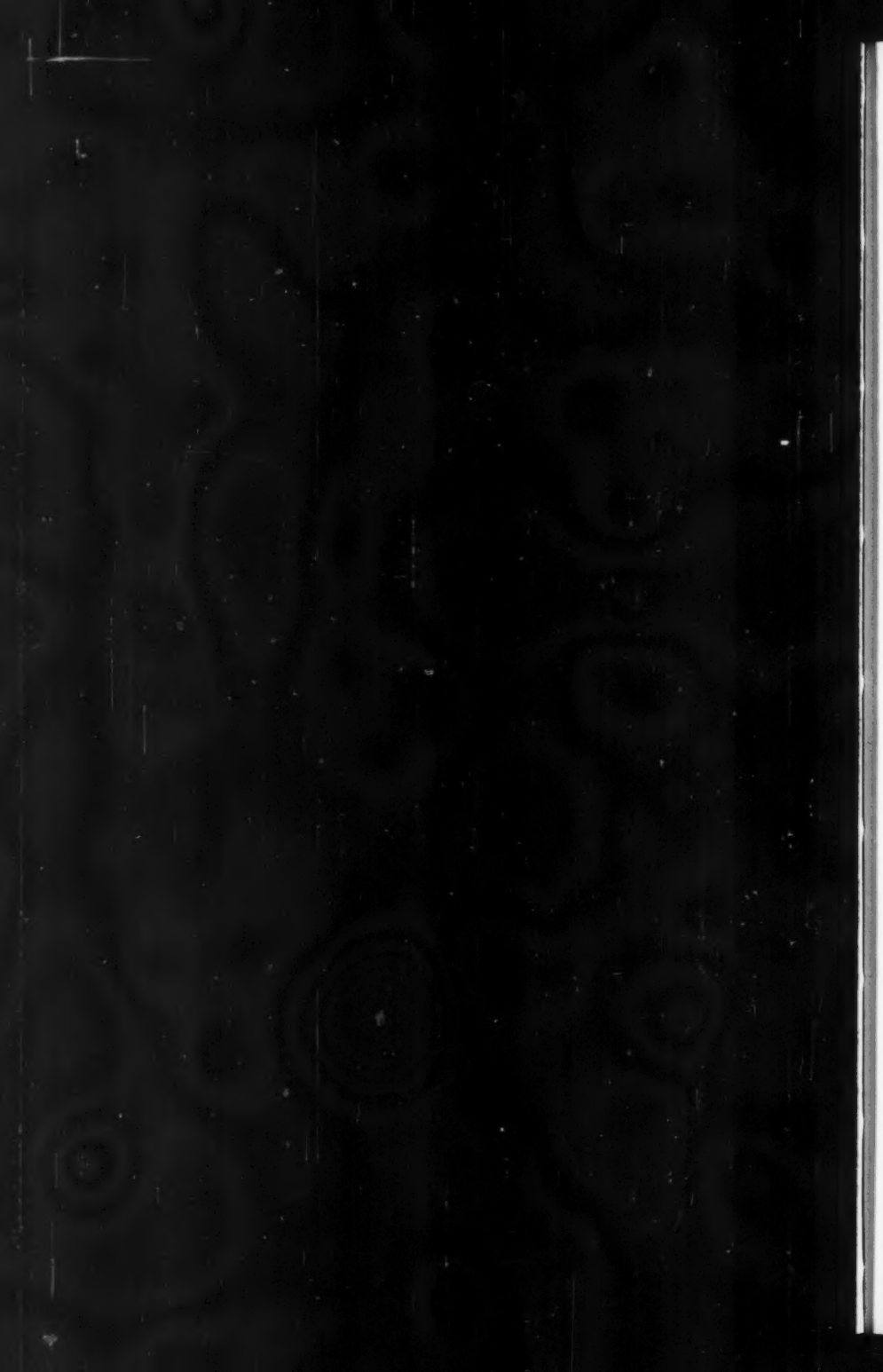
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- THE MERRILL-PALMER QUARTERLY:** published four times yearly by The Merrill-Palmer School. Subscription: \$3.00 per volume; single copies \$1.00.
- CREATIVE ACTIVITIES.** Revised by Dorothy Haupt and D. Keith Osborn, of the Merrill-Palmer School staff. 1955. viii + 104 pages, \$1.00; 10 or more copies @ \$.75.
- LONGITUDINAL STUDY OF INDIVIDUAL DEVELOPMENT.** Leland H. Stott. The Merrill-Palmer School. 1955. x + 116 pages, \$2.75; 10 or more copies @ \$2.00.
- THE MERRILL-PALMER LOGARITHMIC DEVELOPMENTAL GRAPH.** Charles G. Jennings and S. Idell Pyle. Twenty-five forms, 8½ x 11 inches, \$1.00; 100 forms, \$3.50.
- INDIVIDUAL AND MARRIAGE COUNSELING INVENTORY.** Aaron L. Rutledge. 20 Folders, \$1.00; 50 Folders, \$2.00.
- REFLECTIONS ON REFLECTION OF FEELINGS.** Clark E. Moustakas and Roger J. Callahan. *J. Social Psychol.* 43:323-331 (May) 1956.
- AN OBJECTIVE METHOD FOR THE MEASUREMENT AND ANALYSIS OF CHILD-ADULT INTERACTION.** Clark E. Moustakas, Irving E. Sigel, and Henry D. Schollock. *Child Development* 27:109-134 (June) 1956.
- * **THE TEACHER AND THE CHILD: PERSONAL INTERACTION IN THE CLASSROOM.** Clark E. Moustakas. 265 pages. McGraw-Hill, New York, 1956. \$4.50.
- * **THE NURSERY SCHOOL AND CHILD CARE CENTER.** A parents' and teachers' guide. Clark E. Moustakas and Minnie Perrin Berson. 224 pages. Whiteside, New York, 1955. \$3.50.
- * **CHILD DEVELOPMENT: PHYSICAL AND PSYCHOLOGIC GROWTH THROUGH THE SCHOOL YEARS.** Marian E. Breckenridge and E. Lee Vincent. Third edition, 497 pages. W. B. Saunders Co., Philadelphia, 1955. \$5.00.
- * **GROWTH AND DEVELOPMENT OF THE YOUNG CHILD.** Winifred Rand, Mary E. Sweeny, and E. Lee Vincent. Fifth edition revised by Marian E. Breckenridge and Margaret Nesbitt Murphy. 523 pages. W. B. Saunders Co., Philadelphia, 1953. \$4.50.
- DESIGN FOR HAPPY MEALTIMES.** Filmstrip of 48 frames accompanied by a "Discussion Guide." Produced by the Merrill-Palmer School. \$3.50 per print.
- APPETITES AND ATTITUDES: A VIEWPOINT ON FEEDING THE YOUNG CHILD.** Muriel Ginsberg Wagner. Reprint: *Jour. Amer. Dietet. Assoc.* 30:329-334, 1954.
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- A STUDY OF THE SUBTESTS IN THE REVISED STANFORD-BINET SCALE, FORMS L AND M.** Virginia Van Dyne Fleming. Reprint: *Jour. Genetic Psychology* 64:3-36, 1954.
- * **GUIDE FOR ADMINISTERING MERRILL-PALMER SCALE OF MENTAL TESTS.** Rachel Stutsman, World Book Co., 2126 Prairie Ave., Chicago, Illinois.
- * **TEST MATERIALS.** C. H. Stoelting Co., 424 N. Homan, Chicago 24, Illinois. (Catalog available.)
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